

Proposed Wind Energy Facility and Associated Infrastructure on Wolf Wind Farm (Pty) Ltd, near Wolwefontein in the Eastern Cape

27 February 2020

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Draft EA Amendment Report  
juwi Renewable Energies (Pty) Ltd

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Document prepared by:

**Aurecon South Africa (Pty) Ltd**

1977/003711/07

65 York Street

George

6529

PO Box 509

George

6530

South Africa

**T** +27 44 805 5410

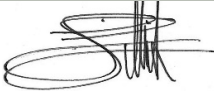

**F** +27 44 805 5454

**W** aurecongroup.com

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<b>Name</b>	Patrick Killick	<b>Name</b>	Charles Norman

# Proposed Wind Energy Facility and Associated Infrastructure on Wolf Wind Farm (Pty) Ltd, near Wolwefontein in the Eastern Cape

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**Aurecon South Africa (Pty) Ltd**  
1977/003711/07  
65 York Street  
George  
6529  
PO Box 509  
George  
6530  
South Africa  
**T** +27 44 805 5410  
**F** +27 44 805 5454  
**E** [capetown@aurecongroup.com](mailto:capetown@aurecongroup.com)  
**W** [aurecongroup.com](http://aurecongroup.com)

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# 1 INTRODUCTION

The Applicant, Wolf Wind Farm (Pty) Ltd, a subsidiary of juwi Renewable Energies (Pty) Ltd (hereafter referred to as juwi) has been authorised to construct a 90MW Wind Energy Facility (WEF) referred to as the Wolf Wind Farm on the border of the Sundays River Valley Local Municipality and Ikwezi Local Municipality, situated approximately 5km north of Wolwefontein, 35km north-west of Kirkwood and 36km south-east of Jansenville, atop the Klein Winterhoek Mountain range in the Eastern Cape. The project was originally authorised on the 14 September 2015, via Environmental Authorisation (EA) ref no. 14/12/16/3/3/2/599, as amended by 14/12/16/3/3/2/599/AM1, 14/12/16/3/3/2/599/AM3 and 14/12/16/3/3/2/599/AM4<sup>1</sup>.

Since the issuing of the authorisation and subsequent amendments, the wind energy market has continued to evolve and adapt and as a result of a changing marketplace, the applicant would like to undertake a further amendment to the EA to enable them to consider the newer wind turbine models that were not previously available or not considered due to technical, environmental and financial reasons at the time of the original Environmental Impact Assessment (EIA) or the subsequent amendments. Some of these turbine models will better serve the project on technical and financial grounds, most notably their ability to harvest a greater amount of wind and thus generating larger amounts of energy per unit, improving the project efficiency and viability. This is important as it ensures the project can bid competitively with other wind projects competing for approval. The current proposed amendments would include the following:

1. **Tower height:** Increase turbine tower height from  $\leq 110\text{m}$  to  $\leq 135\text{m}$
2. **Rotor diameter:** Increase the maximum Rotor diameter from  $\leq 160\text{m}$  to  $\leq 186\text{m}$
3. **Turbine numbers:** Decrease turbine positions from  $\leq 24$  to  $\leq 21$ <sup>2</sup> (dropping turbines No. 1, 2 and 16)
4. **Layout revision:** Micrositing of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).
5. **Update of Applicant address** – The applicant has moved offices and these details will be amended.
6. **Update Condition 13.17:** Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the details of the current amendment

All other aspects of the project, i.e. the total power nameplate capacity of 90MW and the general location of the wind turbines and all associated infrastructure would remain unchanged from the currently authorised project. This modified turbine envelope may result in a change in scope of the EA and, in terms of section 31 of Government Notice Regulation 982 of 4 December 2014 (GN R.982) and previous amendments, a change to the nature or scope of the associated impacts requires an EA amendment process to be undertaken in accordance with Section 32 of GN R.982.

This approach is supported by similar amendment processes for the same project. This report is therefore compiled in fulfilment of the legal requirements for a Part 2 Amendment in terms of Regulation 32 of GN R 982. It provides a description and motivation for the proposed changes, as well as an evaluation of the advantages and disadvantages of the proposed changes, and, if required, introduces new mitigation measures in respect of any impacts resulting from the change. The nature of the changes and sensitivities on the site has required a review from the following specialists: noise, socioeconomic, heritage, Bats, Birds, botanical, and visual. The amendment changes will not significantly impact the construction and decommissioning phase activities and will not significantly impact on the other specialist fields included in the original EIA which have been excluded from this amendment report.

This report will be subjected to a 30-day comment period and all comments considered and responded to in a Comments and Responses Report to be appended to the final EA Amendment Report and submitted to the Competent Authority (CA) for decision making. All Registered I&APs will be notified of the Competent Authority's Decision and provided with an opportunity to appeal any decision.

<sup>1</sup> Please note there is no 14/12/16/3/3/2/599/AM2 because the application for EA lapsed and was restarted as 14/12/16/3/3/2/599/AM3.

<sup>2</sup> Note: the larger the turbine generators the fewer actual turbines will be needed to achieve the 90MW nameplate capacity, while 21 positions area being retained it is likely (particularly at the larger scales) that fewer turbines will be required to meet the 90MW project objective.

## 2 PROJECT DESCRIPTION

### 2.1 Overview and location

An area with suitable wind characteristics was identified by juwi for the purposes of the Wolf Wind Farm. The site is located on the border of the Sundays River Valley Local Municipality and Ikwezi Local Municipality approximately 5km north of Wolwefontein, 35km north-west of Kirkwood and 36km south-east of Jansenville on the Klein Winterhoek Mountain range in the Eastern Cape, as seen in Figure 2-1. The site can be accessed from the R75 and an existing gravel road leading east towards the proposed site. The farms comprising the site amount to approximately 6,902ha in extent while the project footprint or disturbance would constitute up to 1% of the total site area (i.e. 69ha/6,902ha). The project received its original authorisation on 14 September 2015 (see Annexure A.1 for the copy of Application form with the original EA and all amendments appended) and the Name of the EA holder was amended on 11 November 2016 (AM1). The wind turbine rotor diameter (126m to 137m) and project capacity (84MW to 90MW) was amended on 14 September 2017 (AM3). Most recently, the Turbine envelope including max rotor diameter (137m to 160m) and the max tower height (100m to 110m) was amended on 26 November 2018 (AM4).

### 2.2 Project components as currently authorised

The authorised facility (a “90MW Wind Energy Facility”) and associated infrastructure includes the following major components as listed in the EA:

- A site access road;
- Security fencing and access gate;
- New and upgraded site service roads;
- Stormwater control measures associated with all roads;
- 24 wind turbines;
- A new on-site substation;
- Underground electrical cabling, between turbines and onsite substation; and
- A new 132kV overhead transmission line connecting to the existing Eskom Distribution Wolf Substation.



Figure 2-1 | Location and layout of the proposed Wolf Wind Farm near Wolwefontein in the Eastern Cape

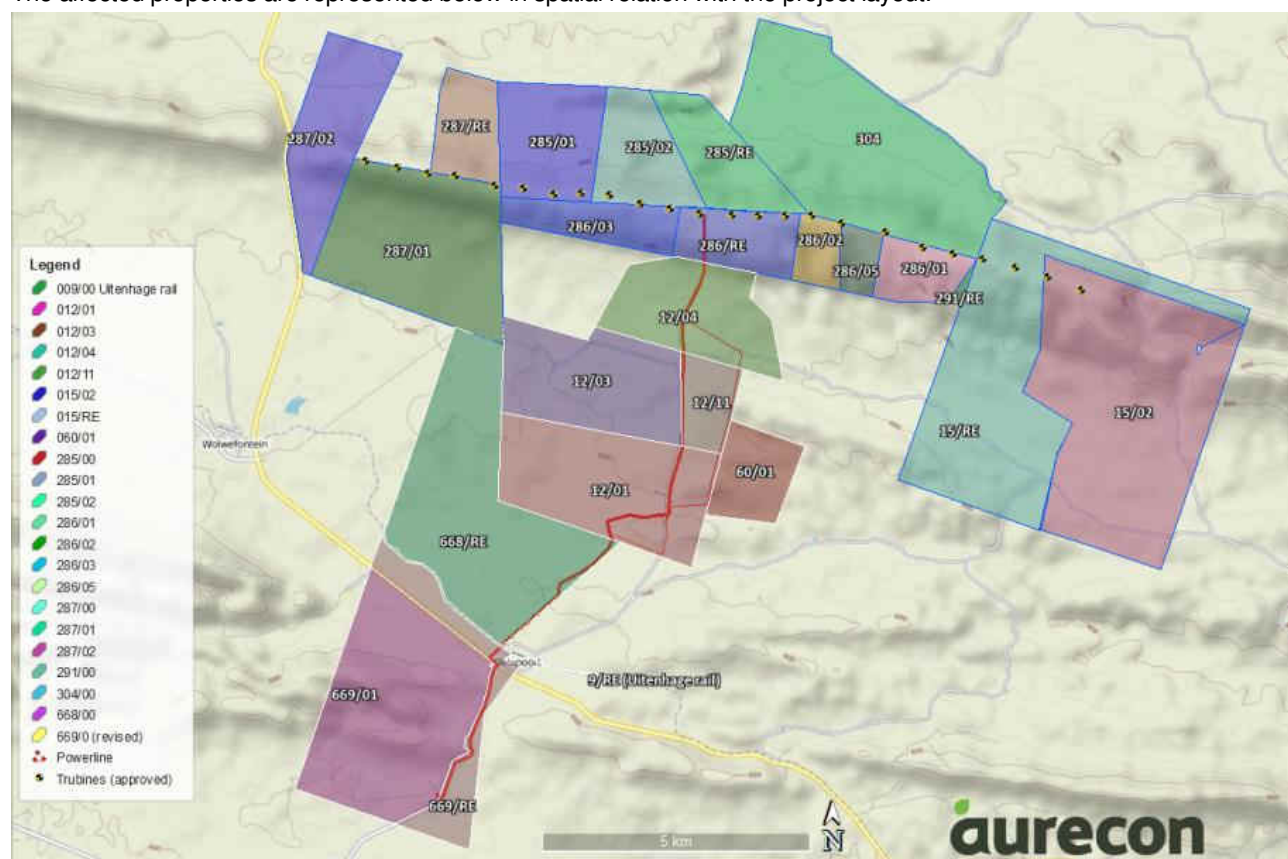
The properties affected by the approved project have been listed in Table 2-1 and are represented spatially with the project components in Figure 2-2 on the overleaf. Note however that during the investigations phase it became evident that new subdivisions were and still are in process and may be registered with the Deeds Office at any time.

The following properties are directly affected by the project.

**Table 2-1 | Affected properties**

	Farm	Portions
Wind Farm – affected land portions	Hartebeestfontein (Farm No. 15) portions:	<ul style="list-style-type: none"> <li>– 15/RE (and potentially 15/4 and a revised 15/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>– 15/2 (and potentially 15/3 which is an unregistered consolidation of 15/2 and 15/1 that can be registered at the Deeds Office at any time);</li> </ul>
	Paardeberg North (Farm No. 285) portions:	<ul style="list-style-type: none"> <li>– 285/RE;</li> <li>– 285/1;</li> <li>– 285/2;</li> </ul>
	Paardeberg South (Farm No. 286) portions:	<ul style="list-style-type: none"> <li>– 286/RE (and potentially 286/4 and a revised 286/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>– 286/1;</li> <li>– 286/2;</li> <li>– 286/3;</li> <li>– 286/5</li> </ul>
	Salt Pan’s Neck (Farm No. 287) portions:	<ul style="list-style-type: none"> <li>– 287/RE;</li> <li>– 287/1;</li> <li>– 287/2;</li> </ul>
	Annex Dassie Kloof Farm (Farm No. 291) portions:	– 291/RE
	Koffylaagte (Farm No. 304)	– 304
Servitude (Transmission line)	Vaalefontein (Farm No. 12) portions:	<ul style="list-style-type: none"> <li>– 12/1;</li> <li>– 12/3;</li> <li>– 12/4 (and potentially 12/10 and a revised 12/4 which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>– 12/11</li> </ul>
	Cauchafskie (60) portions:	– 60/1
	Ouplaas Poort (Farm No. 668) portions:	– 668/RE
	Blaauwbosch Kuil (Farm No. 669) portions:	<ul style="list-style-type: none"> <li>– 669/RE; (and potentially 669/5, 669/9, 699/10 and a revised 669/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time)</li> <li>– 669/1;</li> </ul>
	Uitenhage rail (9/RE)	– 9/RE

The affected properties are represented below in spatial relation with the project layout.



**Figure 2-2 | Affected properties and project layout**



## 2.3 NEMA Activities authorised

In terms of the National Environmental Management Act (NEMA) EIA regulations, the activities listed in Table 2-2 were authorised. It is important to note that the proposed amendment will not affect these activities nor are any activities added or removed as a result of the proposed amendment.

**Table 2-2 | Listed activities authorised in terms of NEMA GN No. 544, 545 and 546**

No.	Listed Activity (2010 original EA)	Similar activities (2014 onwards)	ASPECT OF PROJECT
	<i>GN No. R544, 18 June 2010</i>	<i>GN No. R983, 4 December 2014 as Amended</i>	<i>Project activity</i>
10	The construction 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; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.	<b>11</b> - The construction 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; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.	A 132kV transmission line is proposed to evacuate electricity generated by the Wolf Wind Farm and will run from the onsite substation to the Wolf substation which forms part of the national grid. The transmission line will be situated in a rural area.
11	The construction of: – canals; – channels; – bridges; – dams; – weirs; – bulk storm water outlet structures; – marinas; – jetties exceeding 50 square metres in size; – slipways exceeding 50 square metres in size; – buildings exceeding 50 square metres in size; – or – infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	<b>12</b> - The development of- (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -	Drainage lines occur on the proposed site and one or more roads are likely to cross these watercourses. The access roads will likely follow the watersheds, for ease and robustness of design, and thus impacts to surface water resources should be minimal.
18	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: – a watercourse; – the sea; – the seashore; – the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater- but excluding where such infilling, depositing, dredging, excavation, removal or moving;	<b>19</b> - The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;	The infilling or depositing of any material of more than 10m <sup>3</sup> into a watercourse will be triggered with the construction of internal service roads where these roads cross drainage lines or watercourses.

No.	Listed Activity (2010 original EA)	Similar activities (2014 onwards)	ASPECT OF PROJECT
	(a) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or (b) occurs behind the development setback line.		
22	The construction of a road, outside urban areas, with a reserve wider than 13,5 meters or, where no reserve exists where the road is wider than 8 metres, or for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Notice 545 of 2010.	<b>24</b> - The development of a road- (i) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;	Although site roads are planned to be 7m wide for the most part at certain road sections the verges (or cut-to-fill) might increase the actual width to over 8m and thus this activity is applied for.
<b>GN No. R545, 18 June 2010</b>		<b>GN No 984, 4 December 2014 as amended</b>	<b>Project activity</b>
1	The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.	<b>1</b> - The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more	The proposed Wind Farm would have a generation capacity of up to 90MW in total.
15	Physical alteration of undeveloped, vacant or derelict land for residential retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more; except where such physical alteration takes place for: linear development activities; or agriculture or afforestation where activity 16 in this Schedule will apply.	<b>15</b> - The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The approximate extent of the undeveloped land that would be physically altered is estimated at 69ha disturbed (21ha permanent footprint).
<b>GN No. R546, 18 June 2010</b>		<b>GN No 985, 4 December 2014 as amended</b>	<b>Project activity</b>
4	The construction of a road wider than 4 metres with a reserve less than 13,5 metres. a) In Eastern Cape province: ii. Outside urban areas, in: (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve;	<b>4-</b> The development of a road wider than 4 metres with a reserve less than 13,5 metres. a. Eastern Cape i. Outside urban areas: (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;	The construction of a road wider than 4m with a reserve less than 13,5m (no reserve). The roads associated with the turbine layout will trigger this activity as construction and operation roads would be 7m wide and located outside urban areas in CBAs as identified in the systematic biodiversity plans (Eastern Cape Biodiversity Conservation Plan Technical Report, 2007). Nearest proposed wind turbine is situated 7.5km from the Addo Park Elephant National Park (Addo Park) Addo Park boundary and thus the road leading to the site will trigger this activity.
12	The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation. (b) Within critical biodiversity areas identified in bioregional plans;	<b>12</b> - The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. a. Eastern Cape ii. Within critical biodiversity areas identified in bioregional plans;	The turbine and associated infrastructure including 7m wide access roads will trigger this activity because the area to be cleared would exceed 300m <sup>2</sup> of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation within a CBA as identified in the Eastern Cape Biodiversity Conservation Plan Technical Report (2007).

No.	Listed Activity (2010 original EA)	Similar activities (2014 onwards)	ASPECT OF PROJECT
13	<p>The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, except where such removal of vegetation is required for:</p> <p>(1) the undertaking of a process or activity included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), in which case the activity is regarded to be excluded from this list.</p> <p>(2) the undertaking of a linear activity falling below the thresholds mentioned in Listing Notice 1 in terms of GN No. 544 of 2010.</p> <p>(a) Critical biodiversity areas and ecological support areas as identified in systematic biodiversity plans adopted by the competent authority.</p> <p>(c) In Eastern Cape</p> <p>ii. Outside urban areas, the following:</p> <p>(ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p>	See 12 above	<p>The turbine and associated infrastructure including 7m wide access roads will trigger this activity because the area to be cleared would exceed 1 hectare where 75% or more of the vegetative cover constitutes indigenous vegetation and is outside urban areas and within a CBA as identified in the Eastern Cape Biodiversity Conservation Plan Technical Report (2007)</p> <p>Nearest proposed wind turbine is situated 7.5km from the Addo boundary (within 10 kilometres from national parks).</p>
14	<p>The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation</p> <p>(a) In the Eastern Cape</p> <p>(i) All areas outside urban areas.</p>	See 12 above	A vegetated area estimated at 69ha would be disturbed (with a 21ha permanent footprint).or more would be cleared for the proposed project, which is located in a rural area. The vegetation comprises of 75% or more indigenous vegetation.
16	<p>The construction of:</p> <p>(iv) infrastructure covering 10 square metres or more</p> <p>where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p> <p>In Eastern Cape</p> <p>ii. Outside urban areas, in:</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p>	See 18, below	<p>The infrastructure (including 7m wide access roads) associated with the turbine layout will trigger this activity.</p> <p>The infilling or depositing of any material of more than 10m<sup>2</sup> into a watercourse may be triggered with the construction of internal service roads where these roads cross drainage lines or watercourses. The roads are located in a rural area in the Eastern Cape in CBA or ecosystem service areas as identified in systematic biodiversity plans (Eastern Cape Biodiversity Conservation Plan Technical Report, 2007)</p>
19	<p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>In Eastern Cape</p> <p>ii. Outside urban areas, in:</p>	<p>18 - The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas:</p>	Widening existing farm roads to 7m or more in a CBA as identified in Eastern Cape Biodiversity Conservation Plan Technical Report (2007). The road upgrades will occur within 10kms of the Addo Park.

No.	Listed Activity (2010 original EA)	Similar activities (2014 onwards)	ASPECT OF PROJECT
	(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve.	(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; <b>(kk) A watercourse;</b>	

## 2.4 Original Impact assessment findings

The following table provides a summary of the impact assessment as authorised in the original application. Impacts denoted by the luminous **yellow highlights** pertain to impacts where the EAP was of the opinion that the proposed amendments may result in a change to impact significance ratings and which have been studied further in this amendment report. Note that no changes to impacts in the construction or decommissioning phases are foreseen.

**Table 2-3 | Original EIA impact significance ratings – Construction Phase**

Aspect	Impact	Unmitigated impact significance	Mitigated impact significance
Botanical	Disturbance of natural vegetation and associated ecological processes due to turbine construction (including lay-down areas)	High (-)	Medium (-)
	Disturbance of natural vegetation and associated ecological processes due to the construction of internal access roads	Medium (-)	Low (-)
	Disturbance of natural vegetation and associated ecological processes due to the construction of on-site sub-station	Medium (-)	Low (-)
	Disturbance of natural vegetation and associated ecological processes due to the construction of 132kV transmission line	High (-)	High (-)
Avifauna	Destruction or alteration of bird habitat	Medium (-)	Medium (-)
Bats	Disturbance and/or reduction of habitat	Low (-)	Very low (-)
Agriculture	Loss of agricultural resources/ production associated with the Wind Farm	Very low (-)	Very low (-)
	Loss of agricultural resources/ production associated with the 123kV transmission line	Very low (-)	Very low (-)
Palaeontology	Construction activities (excavations) may result in a negative direct impact on the fossil content of the affected subsurface	Very low (-)	Very low (-)
Heritage	Physical destruction of heritage resources, particularly archaeological artefacts associated with the construction of the Wind Farm	Very low (-)	Very low (-)
	Physical destruction of heritage resources, particularly archaeological artefacts associated with the construction of the access road	Very low (-)	Very low (-)
	Physical destruction of heritage resources, particularly archaeological artefacts associated with the construction of the transmission line	Very low (-)	Very low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the construction of the wind turbines	Medium (-)	Medium (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the construction of the access road	Very Low (-)	Very Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the construction of the transmission line	Low (-)	Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the construction of wind turbines	High (-)	High (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the construction of the access road	Low (-)	Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources Associated with the construction of the Transmission line	Medium (-)	Medium (-)
Visual	Potential visual impact of construction on visual receptors in close proximity to the proposed Wind Farm	Medium (-)	Medium (-)
Socio-economic	Impact on the Economy	Medium (+)	Medium (+)
	Impact on investment	High (+)	High (+)
	Impact on employment and skills transfer	Medium (+)	High (+)
	Impact on tourism and game farming	High (-)	Medium (-)
	Consistency with Development Planning	Medium (+)	Medium (+)
	Impact on In-migration	Medium (-)	Low (-)
	Impact on household income	Medium (+)	High (+)

Aspect	Impact	Unmitigated impact significance	Mitigated impact significance
	Impact on economic & social infrastructure	High (-)	Medium (-)
Noise	Numerous simultaneous construction activities that could impact on receptors.	Low (-)	Low (-)
Freshwater	Water quality impairment	Low (-)	Neutral
	Loss of riparian habitat and bed/bank modification as well as associated loss of aquatic biota	Low (-)	Low (-)
	Hydraulic and flow modification	Low (-)	Neutral
Dust	Dust created by construction activities	Low (-)	Very low (-)
Traffic	Accidents and or traffic congestion	Medium (-)	Low (-)

**Table 2-4 | Original EIA impact significance ratings – Operations Phase**

Aspect	Impact	Unmitigated impact significance	Mitigated impact significance
Botany	Disturbance of natural vegetation and associated ecological processes due to turbine construction (including lay-down areas)	Low (-)	Low (-)
	Use of internal access roads	Low (-)	Low (-)
	Operation of on-site substation	Low (-)	Low (-)
	Maintenance of transmission line	Low (-)	Low (-)
Avifauna	Disturbance of birds, particularly whilst breeding	Medium (-)	Medium (-)
	Displacement of birds from the site	Medium (-)	Medium (-)
	Collision of birds with the turbine blades	Medium (-)	Medium (-)
	Collision and electrocution of birds on overhead transmission lines	High (-)	Low (-)
Bats	Impact on bat populations in the larger area	Very low (-)	Very low (-)
Fauna	Disturbance and/or reduction of habitat	Low (-)	Low (-)
Agriculture	Loss of agricultural resources/ production associated with the operation of the Wind Farm	Low (-)	Very low (-)
	Loss of agricultural resources/ production associated with the operation of the transmission line	Very low (-)	Very low (-)
Heritage	Physical destruction of heritage resources, particularly archaeological artefacts.	Very Low (-)	Very Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the Wind Farm	Medium (-)	Medium (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resource associated with the Access road	Very Low (-)	Very Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the transmission line	Low (-)	Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources. Associated with the Wind Farm	High (-)	High (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources. Associated with the access road	Low (-)	Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources. Associated with the transmission line	Medium (-)	Medium (-)
	Potential visual impact of internal access roads on observers in close proximity to the proposed Wind Farm	Low (-)	Low (-)
Visual	Potential visual impact of the on-site substation on observers in close proximity to the proposed Wind Farm	Low (-)	Low (-)
	Potential visual impact of the overhead power line on observers in close proximity thereto	Medium (-)	Medium (-)
	Potential visual impact on of lighting at night on visual receptors in close proximity to the proposed Wind Farm	Medium (-)	Medium (-)
	Potential visual impact on of shadow flicker on visual receptors in close proximity to the proposed Wind Farm	Low (-)	Neutral
	Potential visual impact on the visual character of the landscape and sense of place of the region	Medium (-)	Medium (-)
	Potential visual impact on the visual character of the landscape and sense of place of the region	Low (-)	Low (-)
	Potential visual Impact of the proposed facility on tourist access routes and tourist destinations within the region.	Low (-)	Low (-)
	Potential visual impact of the proposed facility on conservation areas within the region	High (-)	High (-)
	Potential visual impact on sensitive visual receptors and users of major roads in close proximity to the Wind Farm	High (-)	High (-)
	Potential visual impact on sensitive visual receptors and users of major roads within a 5 – 10km radius of Wind Farm	Very low (-)	Very low (-)
Visibility and potential visual impact beyond a radius of 20km	Very low (-)	Very low (-)	
Socio-economic	Impact on the Economy	High (+)	High (+)
	Impact on investment	Medium (+)	Medium (+)
	Impact on employment and skills transfer	Medium (+)	High (+)
	Impact on tourism and game farming	Medium (-)	Medium (-)

	Consistency with Development Planning	High (+)	High (+)
	Impact on In-migration	Medium (-)	Low (-)
	Impact on household income	Low (+)	Medium (+)
	Impact on economic & social infrastructure	High (+)	High (+)
Noise	Numerous wind turbines operating simultaneously during a period when a quiet environment is desirable.	Low (-)	Low (-)
Freshwater	Water quality impairment	Neutral	Neutral
	Hydraulic and flow modification	Low (-)	Low (-)
Electrical production for the national grid	Contribution of renewable energy to the national grid	Low (+)	Low (+)
Traffic	Accidents and or traffic congestion	Very low (-)	Very low (-)
GHG & Climate change	Reduce the future volume of greenhouse gases emitted to the atmosphere, reducing the greenhouse effect on a regional, national and international scale.	Low (+)	Low (+)
	Reduce the future volume of greenhouse gases emitted to the atmosphere, reducing the greenhouse effect on a regional, national and international scale.	Low (+)	Low (+)

**Table 2-5 | Original EIA impact significance ratings – Decommissioning Phase**

Aspect	Impact	Unmitigated impact significance	Mitigated impact significance
Flora	Disturbance of natural vegetation and associated ecological processes due to removal of turbines	Medium (-)	Low (-)
	Closure of internal access roads and restoration of natural vegetation	Medium (-)	Low (-)
	Closure of on-site sub-station	Medium (-)	Low (-)
	Removal of 132 kV transmission line	Medium (-)	Low (-)
Fauna	Disturbance and/or reduction of habitat	Low (-)	Very low (-)
Heritage	Physical destruction of heritage resources, particularly archaeological artefacts.	Very low (-)	Very low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the Wind Farm.	Medium (-)	Medium (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the Access road	Medium (-)	Very low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the transmission line.	Low (-)	Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the Wind Farm.	Medium (-)	Medium (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the access road.	Low (-)	Low (-)
	Visual intrusion into the cultural landscape and context of surrounding heritage resources associated with the transmission line.	Medium (-)	Medium (-)
Traffic	Accidents and or traffic congestion	Medium (-)	Low (-)

\* Note that the direct impact on heritage resources for the operation phase is rated as low (-) and the high (-) impact rating shown here relates to visual impacts to landscape, setting and character (generally referred to as “sense of place”).

## 3 PROPOSED AMENDMENT

### 3.1 Context and description of the proposed amendment

The applicant, Wolf Wind Farm (Pty) Ltd, a subsidiary of juwi Renewable Energies (Pty) Ltd, has been authorised to construct a 90MW Wind Energy Facility (WEF) referred to as the Wolf Wind Farm on the border of the Sundays River Valley Local Municipality and Ikwezi Local Municipality, situated approximately 5km north of Wolwefontein, 35km north-west of Kirkwood and 36km south-east of Jansenville, atop the Klein Winterhoek Mountain range in the Eastern Cape. The project was originally authorised on the 14 September 2015.

Since issuing of the Environmental Authorisation (EA), the wind energy market has evolved quickly, with larger and more efficient wind turbine models becoming available all the time. To remain competitive and have a reasonable chance of bidding a winning project in the Department of Energy’s Renewable Energy Independent Power Producer Procurement Programme (REI4P), the project must keep pace with the technology and efficiencies to remain viable and competitive with the marketplace. In this regard the Applicant has already amended the turbine envelope for this project on two previous occasions and the fast-moving market has again prompted the applicant to increase the turbine size envelope. The

following table provides the key turbine specifications as originally approved plus both amendments and the proposed new amendments.

Aspect	Original EA	Revision 1 (AM3)	Revision 2 (AM4)	Now proposed (AM5)
Total generation	84MW	≤90MW	≤90MW	≤90MW
No Turbines	24	24	≤24	≤21
Max Hub height	100m	100m	≤110m	≤135m
Rotor diameter	126m	≤137m	≤160m	≤186m
Blade bottom tip height	NA	Not less than 31.5m	Not less than 30m	Not less than 30m
Blade top tip height	≤163m	≤168.5m	≤190m	≤228m
Turbine positions	Original preliminary layout	Original preliminary layout	Original preliminary layout	Micrositing of 8 turbines and revised preliminary layout* -, and the refinement of roads, cable routes, laydown areas, substation and building locations.

\* Note that the layout would still need to be finalised following the pre-construction walkthrough, thus it retains its “preliminary” status.

With the increased turbine size and efficiencies, the project can reduce the maximum number of turbine positions from 24 to 21 and still have confidence that it can generate the approved 90MW. The amendment has also kept the minimum blade tip height above ground unchanged, at 30m (avoiding the high bat and bird traffic zone found at lower altitudes). By extrapolating the turbine market trajectory for onshore turbines, it is foreseeable that there may be larger wind turbine generators (i.e. in the 6MW or 8MW each range) available in the market by the time the project is implemented, which may mean even fewer turbines would be constructed (i.e. 12-15 turbines needed to reach the 90MW). This market trajectory is illustrated in the following graph of actual industry Rotor Diameter (RD) versus per turbine generator size in the past and extrapolating into the future.

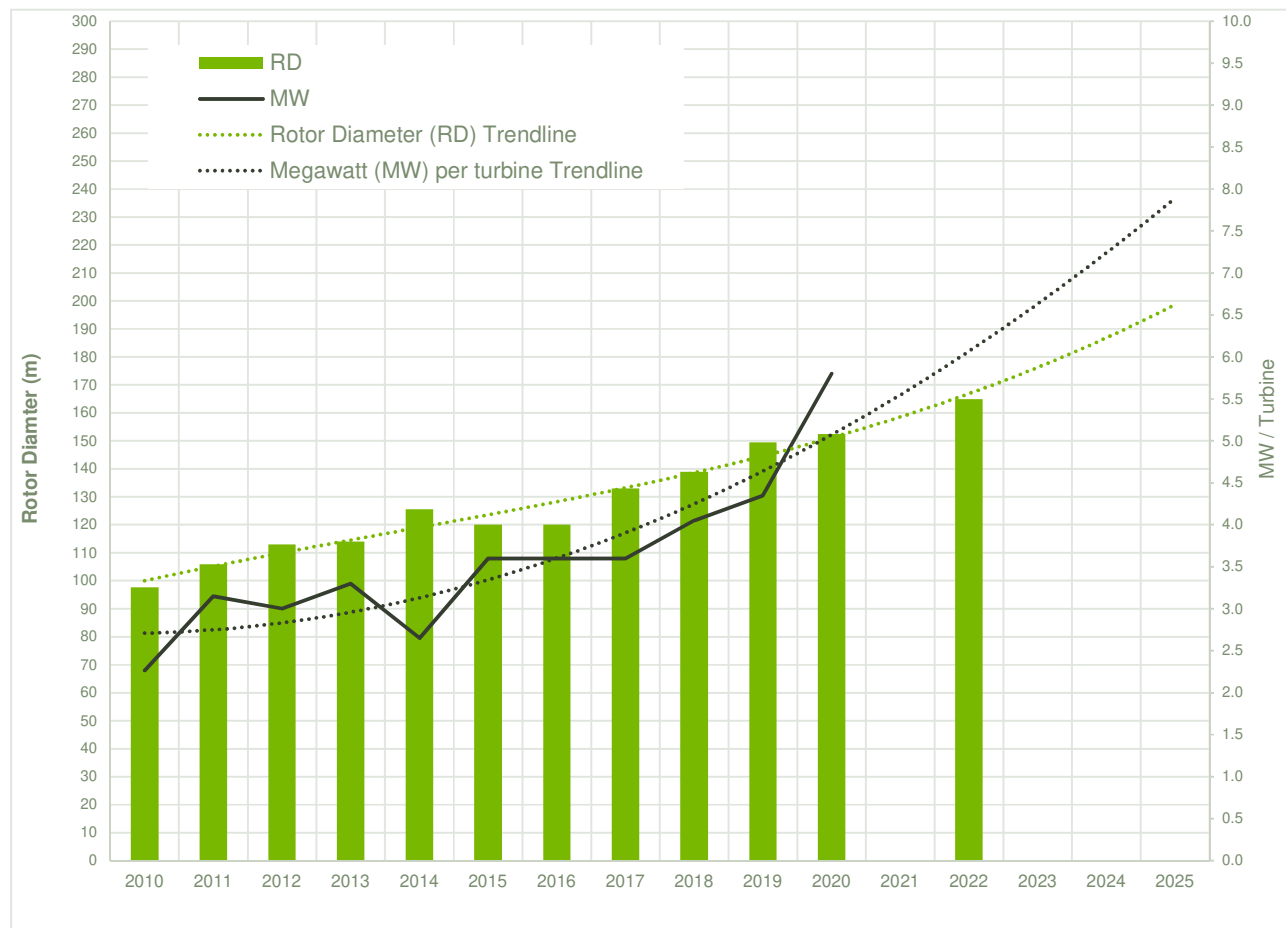


Figure 3-1 | Growth in wind turbine rotor and electrical generator<sup>3</sup>

<sup>3</sup> Source: juwi renewable energies (Pty) Ltd

During the initial engagements with specialists regarding the current proposed amendments it came to light that the increased rotor diameter would bring some turbine blades into proximity with the bat sensitive areas. The larger rotor diameters brought the swept area closer to these areas that had been previously identified and buffered for the protection of bats. As a result, the applicant has agreed to microsite a number of turbines as part of this amendment to ensure safe setback distances are observed. Further to this, the three sacrificial turbine positions, were selected as those that impinged most on the sensitive bat zones (i.e. turbine positions 1, 2 and 16).

The increase in size and micro siting of 8 turbines also resulted in the need to revisit and revise / refine the other project infrastructure which support the turbines. Thus, minor changes to the infrastructure shape (i.e. road curves, turning areas), and the location has been adjusted to provide a clearer view of a potential final layout. The layout remains in draft format and will only be finalised in the pre-construction phase following a walkthrough and additional specialist inputs before being submitted for approval in accordance with Condition 12 of the EA. Noting this and the following condition 13 which stipulates what needs to be included in the final layout including Condition 13.17, which states – “*A map of the final layout plan superimposed (overlain) on the environmental sensitivity map. The map must reflect the proposed location of turbines as stated in the amended EIR dated 26 June 2015 and this authorisation.*” Naturally the underlined portion of this Condition would need to be updated to refer to the current layout (if approved) and not that of the 2015 EIR. This report has been updated to reflect this update, but a revised final application would need prepared and submitted with the Draft EA Report (A copy is provided in Annexure A.3).

All other aspects of the project, i.e. the total power nameplate capacity of 90MW and the general location of the wind turbines and all associated infrastructure would remain unchanged from the currently authorised project.

### 3.2 Proposed changes to the project

The proposed amendments would include the following:

1. **Tower height:** Increase turbine tower height from  $\leq 110\text{m}$  to  $\leq 135\text{m}$
2. **Rotor diameter:** Increase max Rotor diameter from  $\leq 160\text{m}$  to  $\leq 186\text{m}$
3. **Turbine numbers:** Decrease turbine positions from  $\leq 24$  to  $\leq 21^4$  (dropping turbines No. 1, 2 and 16)
4. **Layout revision:** Micro siting of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).
5. **Update of Applicant address** – The applicant has moved offices and these details will be amended.
6. **Update Condition 13.17:** Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the details of the current amendment

Note that the proposed amendments, listed above, were refined following the submission of the original application form (Annexure A.1) and thus a copy of the revised application form reflecting these amendments has also been included in Annexure A.3. The original revised application form will be submitted to the DEA together with the draft EA report at the start of the comment period.

The following maps provide a comparison of the proposed amended layout (shown in red) versus the current approved layout (shown in blue), which underpin the impact review provided in this EA amendment report.

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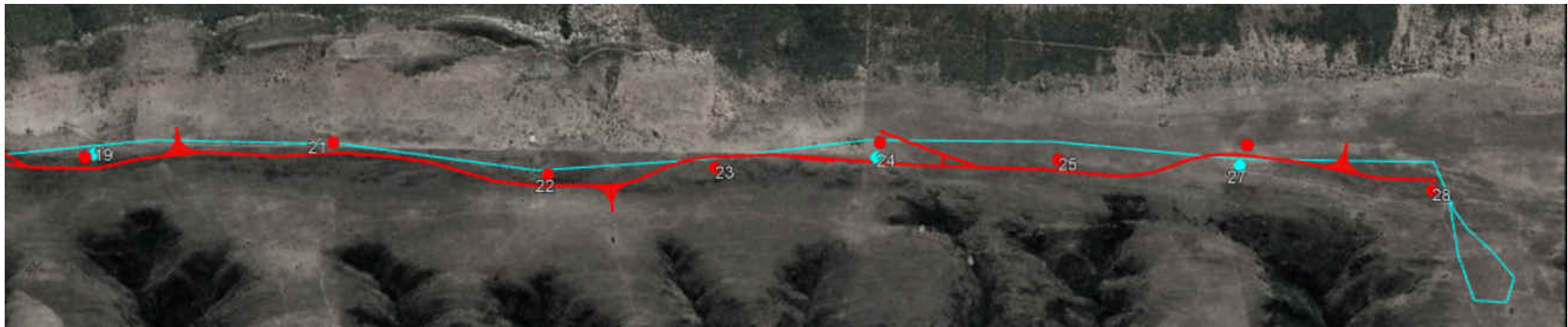
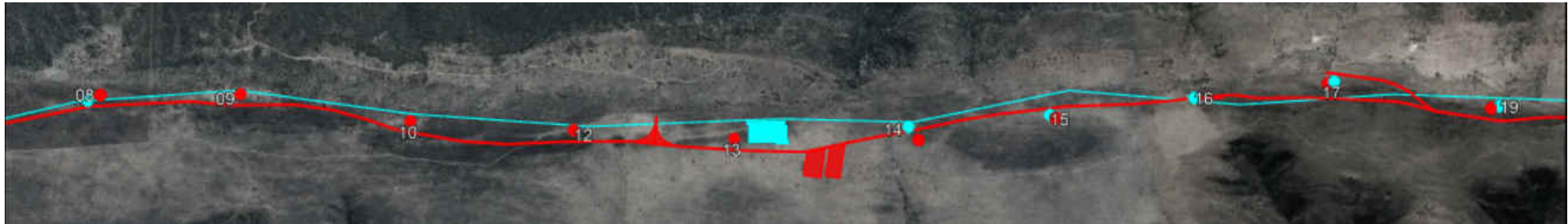
<sup>4</sup> Note: the larger the turbine generators the fewer actual turbines will be needed to achieve the 90MW nameplate capacity, while 21 positions are being retained it is likely (particularly at the larger scales) that fewer turbines will be required to meet the 90MW project objective.





**Figure 3-2 | Proposed amendment (in red) vs approved layout (in blue)**

A closer view of this layout is provided in the three zoom sections provided on the overleaf and show the provisional refinements to the project layout (please note that a final layout must still be produced and submitted for approval in the pre-construction phase).



The following image provides an illustration and scaled comparison between the approved and proposed turbines

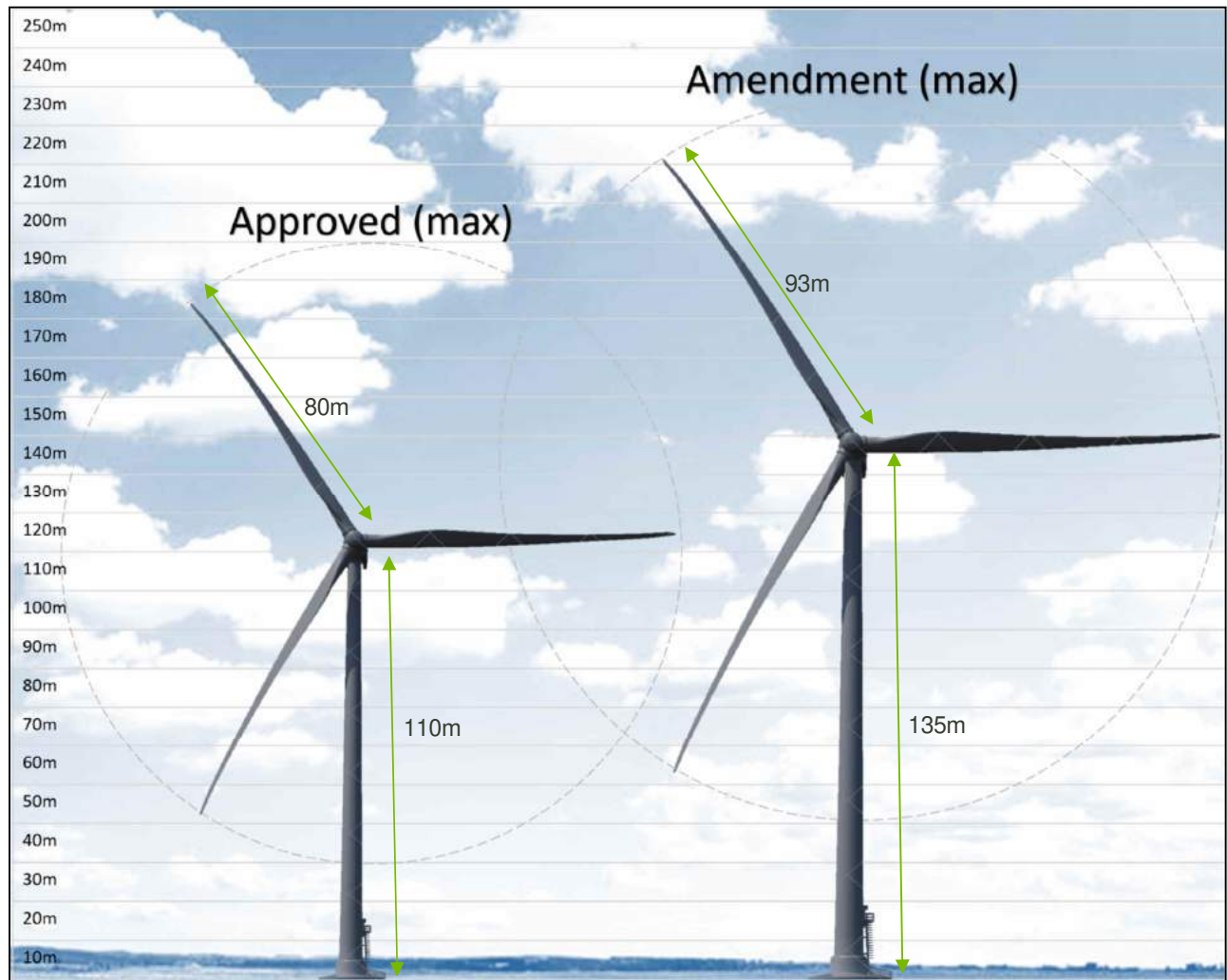


Figure 3-3 | Comparison between approved vs proposed changes to the turbine envelope.

### 3.3 Motivation for the proposed change

Since issuing of the Environmental Authorisation (EA), the wind energy market has evolved quickly, with larger and more efficient wind turbine models becoming available all the time. To remain competitive and have a reasonable chance of bidding a winning project in the Department of Energy's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), the project must keep pace with the technology and efficiencies to remain viable and competitive with the marketplace. In this regard the Applicant has already amended the turbine envelope for this project on two previous occasions and the fast-moving market has again prompted the applicant to increase the turbine size envelope.

The motivation for the amendment is due mainly to market constraints and opportunities, and can be summarised as follows:

1. Market supply constraints for certain turbines including older technology (older turbines, like those originally authorised, may not be available);
2. Improved technology certified and available only after original Environmental Approval and the subsequent amendments;
3. Unforeseen delays in REIPPPP, which calls for technology update;
4. Better fit for purpose technology is available today to suite the wind resource of the site and the applicant would like to increase the wind turbine envelope to allow them to consider a broader range of manufacturers and wind turbine models which can enhance the environmental, technical and financial feasibility of the project and avoid potential implementation delays;
5. The project must be updated according to the latest technology if it is to remain feasible and competitive against other projects being bid as part of the REIPPPP.

### 3.4 Advantages and disadvantages of the proposed change

In accordance with Section 32(1)(a)(ii) of the 2014 EIA Regulations, the report for amendment should present the advantages and disadvantages of the proposed changes, which are provided here:

**Table 3-1 | Advantages and disadvantages of the proposed change**

<b>Advantages</b>
To utilise a more technically advanced and/or financially suited wind turbine model leading to improved project efficiency and feasibility.
Greater energy production from sustainable local resources means less reliance on fuel imports, greater national resilience to fluctuations of the Rand contributing to an improved local economy.
The use of larger blades and hub height will increase the CAPEX of the project, resulting in greater investment into the region and increased local job creation associated with the wind farm construction. This is however offset by the reduction in numbers of turbine positions
A revised turbine envelope equates to greater turbine options which will improve the likelihood of timeous implementation of the project by avoiding turbine manufacturers or models that are currently suffering from a manufacturing backlog because of the high global demand at present.
Potentially improve operational performance by selecting a more technically suitable turbine model leading to an improved electrical generating performance for the national grid.
Renewable energy procurement processes call for technology updates, to ensure that South Africa's renewable energy infrastructure is exposed to and can benefit from global Best Available Technology (BAT).
Newer turbine models, although larger, are often quieter too due to advances in turbine technologies.
At the larger end of the envelope the lower tip lifts away from the ground and thus out of the highest traffic bat and bird zones found at lower altitudes and reducing collision risk on aggregate (i.e. all species).
The revised turbine layout (including those turbine positions that were sacrificed in this amendment) responds to the latest guidelines for bats and should marginally reduce the impact on bats.
<b>Disadvantages</b>
While the overall additional effect on project visual impact is assessed to be minimal. The larger rotor diameter and tower height on the turbines will increase the stature of individual turbines. One should however note that this is within the context that wind farms have high (-) visual impact due to the size of the turbines and even though the changes will be notable they will not drive the impact rating any higher.
Micrositing of turbines and associated infrastructure was required with the purpose of complying to ecological sensitivity buffers and wind farm constructability and safety requirements

## 4 AMENDMENT RELATED IMPACTS

Of the environmental impacts identified and assessed during the original EIA, the proposed amendment has the potential to affect six of these speciality fields, namely, Noise; Socioeconomic, Heritage (sense of place); Visual; Avifauna; and Bats.

The following key specialists, who undertook the original EIA assessments, were asked to review the proposed project amendments and indicate if a review their impact assessments were required. The following fields of study were approached:

- **Botanical** (Bergwind) - Found that a detailed review is not required (see Annexure B.1)
- **Noise** (EAR) – Found that a review is not required (see Annexure B.2)
- **Socioeconomic** (UrbanEcon) – Found that a review is not required (see Annexure B.3)
- **Heritage** (ACO Associates) - – Found that a review is not required (see Annexure B.4)
- **Visual** (LOGIS) – determined that a review should be undertaken (see Annexure C.1) -
- **Bats** (Animalia) – determined that a review should be undertaken (see Annexure C.2)
- **Birds** (Jon Smallie) – determined that a review should be undertaken (see Annexure C.3)

The following section provides a summary of their findings in relation to proposed amendment, as described under Section 3. It should be noted that the proposed amendments would have no bearing on the impacts recorded and assessed for the construction phase, as the same level of construction would be required, methodologies and materials would remain unchanged and thus only exert influence in the operations phase.

## 4.1 Botanical impact

Dr Dave McDonald of Bergwind Botanical Tours was requested to assess of the botanical impacts associated with the proposed amendment. He determined that the amendment would not result in a change to the impact significance rating and as the proposed amendment and refined layout would not:

- • result in any new impacts on the vegetation and flora,
- • change the nature or scope of the impacts already assessed, or
- • materially change the impact significance rating or associated mitigation recommendations originally presented.

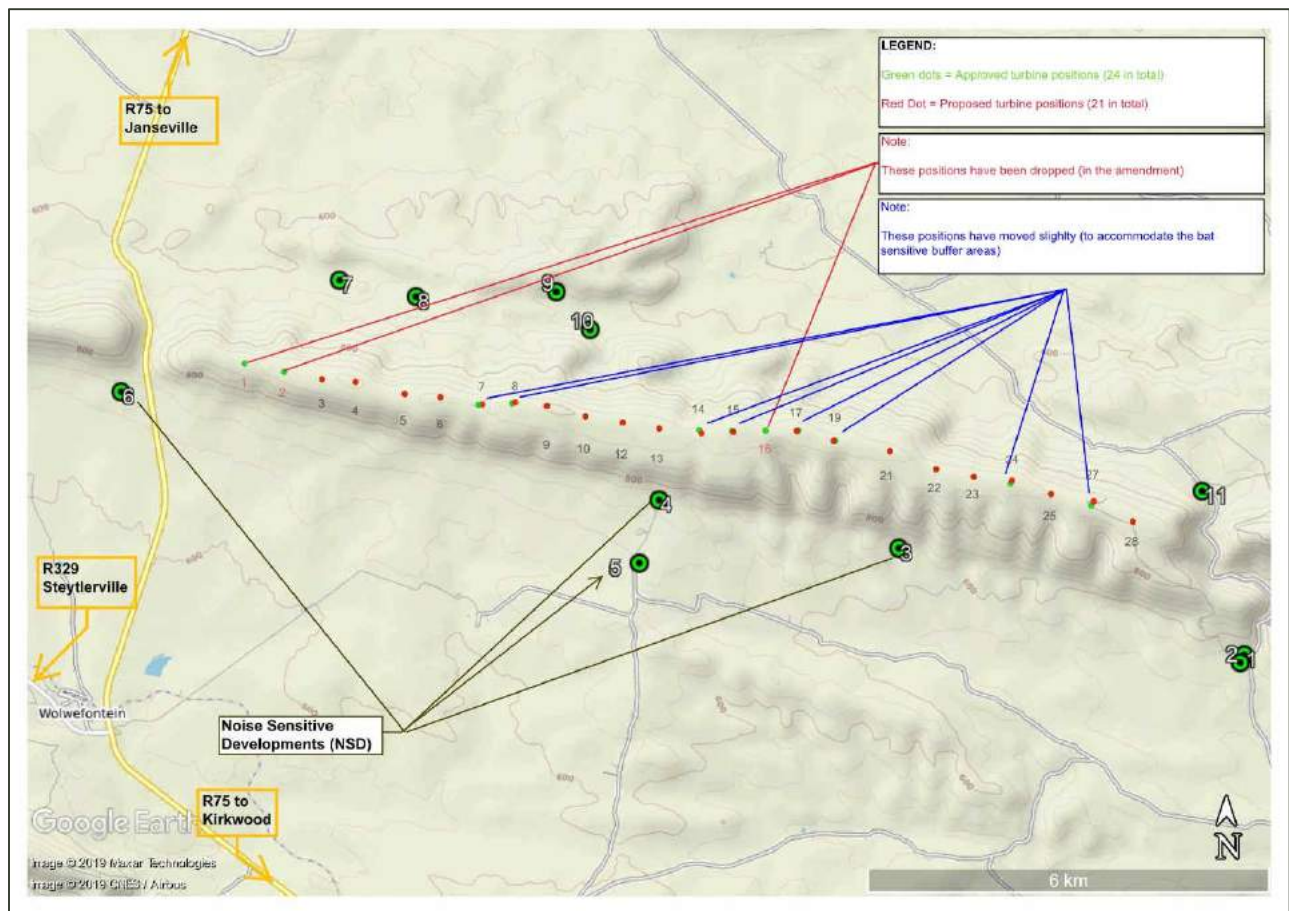
**Therefore, the proposed amendment would have no significant effect on the impact profile from a botanical perspective and a review of the assessment is neither required and nor would it materially change a decision.** His statement is found in Annexure B.1.

## 4.2 Noise impacts

Morné de Jager of Enviro-Acoustic Research cc (EAR) was requested to undertake a review of the proposed amendment and determine if the impact assessment required review. The report is attached here as Annexure B.2 and an overview is provided here.

EAR was commissioned to undertake a specialist study to determine the potential noise impact on the surrounding sound environment due to the establishment of the Wolf Wind Farm. The facility initially proposed to accommodate up to 28 turbines appropriately spaced wind turbines (of which 24 were approved). The noise study used the sound power emission levels of a wind turbine with a high sound power emission level of 109 dBA (which is at the high end of the noise spectrum for commercial turbines and was used as it would represent the worst-case-scenario, at the time).

Wolf Wind Farm (Pty) Ltd is seeking approval to increase the rotor diameter from the approved 160m to  $\leq 186$ m (proposed amendment) and the turbine tower height from 110m to  $\leq 135$ m. With larger turbines the number of turbines positions being applied for decreases from 24 to 21 (max), although even fewer are likely to be constructed— layout depicted in Figure 4-1. Turbine positions 1, 2 and 16 have been ceded in this amendment. Also, to better avoid bat buffers with the larger turbine blades, eight turbines have been moved slightly or micro sited (see map on overleaf).



**Figure 4-1 | Proposed changes to layout vs NSDs**

These changes are unlikely to affect the noise impact profile and the findings of the original noise impact report since the distance between the various NSDs and the nearest turbines are not affected by the changes, with the exception of NSD06 who is now further away, but was originally assessed to receive a “very low (-)” noise impact, and the changes are unlikely to affected this finding or the overall impact profile.

While newer turbines are trending toward larger rotor diameters they are also trending toward lower noise levels. This is because, as wind turbines evolve, manufacturers are addressing the noise emission levels in the newest wind turbine models and it is possible that the latest wind turbine models will be quieter than the wind turbine model considered for the Environmental Noise Impact Assessment. It is therefore likely that proposed amendment will result in a lower noise level than that used as the basis for the impact assessment in the Original EIA, but the difference is negligible.

In conclusion, provided that the selected wind turbine model has a sound power emission level equal or less than 110dBA, the changes will not alter the impact profile and findings of the Environmental Noise Impact Report. **The results, findings, any mitigation measures, recommendations and conclusions would remain the same. The significance of the noise impact would remain as originally assessed and it will not be necessary to review the report, findings, recommendations and conclusions. The original noise impact assessment would still be valid and no additional noise studies will be required.**

In the unlikely event that a wind turbine model with a sound power emission level higher than 110dBA is selected, then a noise specialist must be commissioned to revise the noise model and advice on turbine micro-siting to ensure that noise at the nearest sensitive receptors are kept within specified limits (i.e. 110dBA). This should be included as a condition in the amended authorisation.<sup>5</sup>

### 4.3 Socioeconomic impact

Marcel Theron of Urban-Econ was requested to undertake a reassessment of the socioeconomic impacts as described in the original EIA and amended EAs. The review is attached here as Annexure B.3 and an overview is provided here.

In the initial development concept, juwi proposed to construct a Wind Energy Facility and associated infrastructure with a

<sup>5</sup> Note: A noise specialist will be included in the pre-construction walkthrough phase to remodel the noise impacts if needed.

generation capacity of 84MW on farms near Wolwefontein (This was amended to 90MW in the first amendment). The proposed wind energy facility would comprise of 28 turbines, a hub height of up to 100m with three 60m long blades<sup>6</sup>. However, in 2019, due to ongoing developments in the turbine market, juwi decided to amend their EA application to allow for an increased wind turbine envelope and to allow for larger wind turbines at the Wolf Energy Facility, in line with the marketplace.

The generation capacity for the Wolf Energy Facility would remain the same (i.e. at 90MW) but an increase in the turbine size (physical specs and generation capacity per turbine) is proposed. With larger turbines the number of turbines required has been reduced from 24 to 21 and it is expected that even fewer would ultimately be installed. The 21 turbines would only be installed in the event the smaller turbines are used.

The initial Socio-Economic Impact Assessment conducted in 2013 identified and assessed the following impacts

Positive impacts	Negative impacts
Impact on the Economy	Impact on In-migration
Impact on Investment	impact on Economic & Social Infrastructure
Impact on Employment & Skills Transfer	Impact on Tourism and Game Farming
Consistency with development planning	
Increase in household earnings	

**It was determined that the proposed changes envisioned by juwi would not result in any significant change in any of the socio-economic impacts identified in the table above and assessed previously.** If resultant change were to occur it would be marginal and would not impede the impact assessment ratings and mitigation measures would remain unchanged

#### 4.4 Heritage impact

Tim Hart of ACO Associates was asked to undertake a review of the potential heritage impacts as a result of the proposed amendments. This is closely linked with visual impacts as it relates to the potential impact on sense of place. The statement is attached here as Annexure B.4 but concluded that the proposed amendments would **not** result in any new impacts, change the nature or scope of the impacts already assessed, or materially change the impact significance rating or associated mitigation recommendations originally presented. **Therefore, the proposed amendment would have no significant effect on the impact profile from a Heritage perspective and a detailed review of the assessment is neither required and nor would it materially change a decision.**

#### 4.5 Visual impacts

Lourens du Plessis of LOGIS was commissioned to undertake a reassessment of the visual impacts described in the original EIA. The report is attached here as Annexure C.1 and an overview is provided here.

Juwi Renewable Energies (Pty) Ltd wishes to amend the dimensions of their wind turbine generators (WTG) for the proposed Wolf WEF. The intended amendment includes an increased rotor diameter from 160m to a maximum of 186m diameter (an increase of 26m) and maximum tower hub-height from 110m to 135m. The primary relevance of this proposed increase in dimensions, from a visual impact perspective, is that the total maximum vertical dimension (tip height) of the wind turbine increases from approximately 190m to 228m above ground level or 38m per WTG.

A comparative viewshed was compiled which shows the affected areas of the approved project in green and the additional affected areas, due to the proposed amendment, in red. This reveals the amendment will have a marginal increase of viewshed.

<sup>6</sup> Note that original...

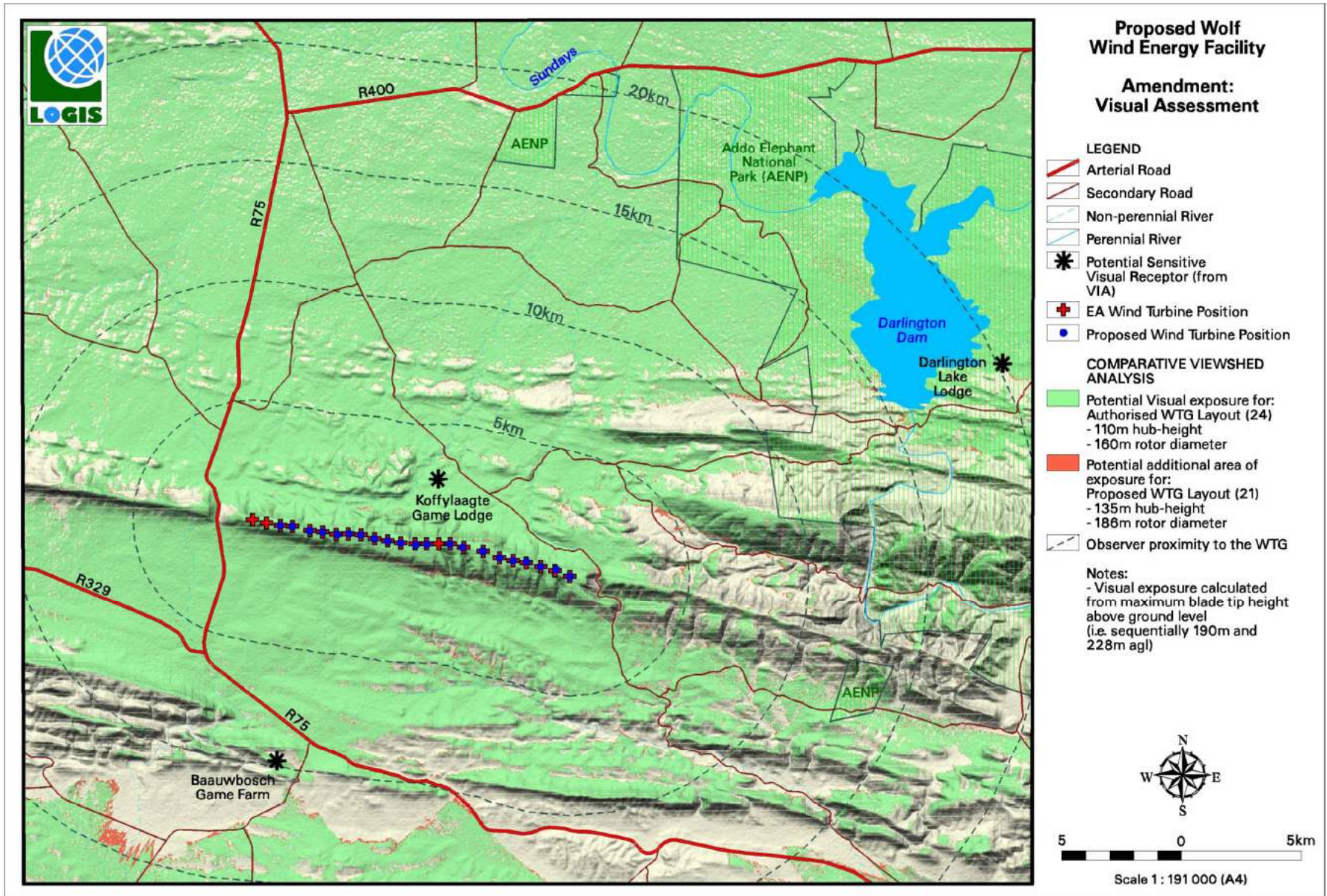


Figure 4-2 | Viewshed increase due to proposed amendments



The ~17% increase in total turbine dimensions results in a ~2% increase in visual exposure. Within the 2% there are no additional sensitive visual receptors located within a 20km radius of the turbines that would be affected. Nor are there any additional major roads affected by the amendment.

It is expected that both the original and larger dimensions would be equally visible and noticeable from all exposed roads and sensitive locations identified in the original EIA, therefore signifying a negligible change to the potential visual impact as originally assessed. Sensitive visual receptors within a 20km radius (identified during the EIA phase) include:

- Addo Elephant National Park (AENP - especially the Darlington Lake Lodge and surrounds)
- The Koffylaagte Game Lodge
- Blaauwbosch Game Reserve
- AENP 4x4 Wilderness Trail
- Observers travelling along the R400, R75, R329 arterial roads and secondary roads

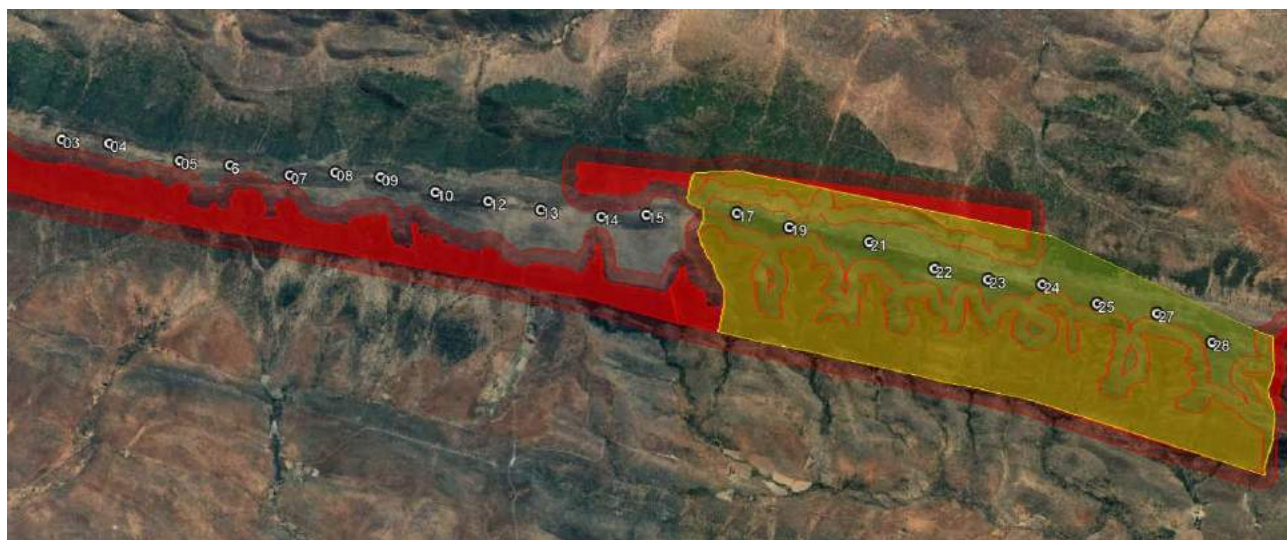
**From a visual perspective, the proposed changes to the turbine dimensions and turbine layout will not alter the nature or scope of the visual impacts and therefore require no (zero) change to the significance rating within the original visual impact assessment report that was used to inform the approved EIA and the subsequent amendments thereafter. In addition to this, no new mitigation measures are required.** Consequently, the visual impact (significance rating and profile), as stated in the original VIA report, remains unaffected by the proposed amendments and no additional impacts, mitigation measures or alterations to the EMP are required.

#### 4.6 Impact on Bats

Werner Marais of Animalia was commissioned to undertake a review of the potential impacts on bats undertaken in the original EIA. The review is attached here as Annexure C.2 and an overview is provided here.

Animalia Consultants (Pty) Ltd completed the bat EIA impact assessment and preconstruction monitoring in 2014 for the Wolf WEF, in addition provided input to EA Amendments in 2016 and 2018 to accommodate turbine dimensions changes. Due to market forces, the applicant wishes to apply for another EA amendment to increase the approved turbine dimensions, and, this time, reduce the number of turbines and microsite certain turbines.

Due to recent insights regarding necessary buffer distances for high bat sensitivities, the buffer distances of the bat sensitivity map were revised upwards from 150m to 200m, to align with the latest South African Good Practice Guidelines for Surveying Bats at Wind Energy Facility Developments - Pre-construction: Edition 4.1. (Sowler, et al., 2017). The reduction of the number of turbines as well as micrositing of turbine positions by the applicant respects and accommodates the updated bat sensitivity map. Figure 4-3, illustrates the updated high bat sensitivity buffers, in relation to the proposed amended turbine layout.



**Figure 4-3 | Bat sensitivity map with increased high sensitivity buffers. White dots = proposed 21 turbine layout base locations; Solid red = high bat sensitivities; Opaque red = 200m high bat sensitivity buffer; Yellow = moderate bat sensitivities.<sup>7</sup>**

<sup>7</sup> Please note that Turbine position 1, 2 and 16 have been sacrificed in this amendment and thus the map starts at turbine position 3. But does cover the full site area.

When considering the lower elevations of the high bat sensitivities in relation to turbine base positions, apart from turbines 27 and 28, all of the turbine rotor swept zones will be outside of the required 200m setback from the sensitive zones. Turbines 27 and 28 will intrude by 3.4m and 2.5m and is considered negligible (and can even be resolved through further minor micrositing in the final layout).

During the long-term preconstruction monitoring study, bat activity was measured to be significantly higher at 10m than at 50m, indicating a clear reduction in activity with an increasing height above ground. Therefore, even though the total rotor swept airspace is greater with the proposed amendments, the increased maximum rotor tip height is not expected to increase risks of impacts to bats. The minimum authorised rotor swept height of 30m remains unchanged and acceptable, although it's likely that the larger turbine models within the envelope would in fact increase minimum rotor swept height, which can reduce the risks of impact to bats.

The micrositing of 8 turbines in the proposed layout, as well as the reduction in the number of turbines (from 24 to 21), respects the revised bat sensitivity map and may further decrease the risk of impacts on bats. It's also likely that larger and more efficient turbine models may be available in future, further reducing the number of turbines installed. In such event, from a bat perspective only, the turbine positions that should be sacrificed from the layout in order of preference are as follows: Turbines 27, 28, 24, 05, 07, 14 and lastly 19 (thereafter, from, east to west).

Animalia has reviewed the proposed amendment, and all the assessment of impacts as well as the mitigation measures specified in the EIA phase bat assessment and preconstruction study remain unchanged by the proposed amendment. Even though in a broader spectrum, the proposed amendments may reduce the risk of impacts on bats, which is seen as generally positive, however the reduced risks are **not sufficient enough to change the impact significance ratings or recommended mitigations determined of the original study**. The proposed amendments are acceptable from a bat sensitivity perspective.

## 4.7 Impact on Birds

Jon Smallie of Wild Skies was commissioned to undertake a review of the avifauna impacts as described in the original EIA. The report is attached here as Annexure C.3 and an overview is provided here.

WildSkies Ecological Services (Pty) Ltd (hereafter WildSkies) was contracted by juwi to conduct 12 months of pre-construction bird monitoring for the Wolf Wind Energy Facility (in 2013-2014), and subsequently contracted by Aurecon to conduct the avifaunal impact assessment study as part of the EIA (in 2014). Two further amendments to the turbine envelope were assessed in May 2016 and May 2018 (WildSkies 2016, WildSkies 2018). Juwi now propose to make a fourth amendment to further change to the planned turbine envelope. The rotor swept area for the entire wind farm is currently 482 549m<sup>2</sup> (24 x 160m rotor diameter) and under the current application it would increase to 570 604m<sup>2</sup> (21 x 186m rotor diameter). This is a worst-case scenario increase of 18% in combined swept area for the proposed amendment.

The proposed changes to the facility are discussed in more detail below but essentially there are two aspects of this change in turbine model that are relevant to assessing bird turbine collision risk:

- A. The possible change in height above ground at which the rotor will be; and
- B. The change in overall size of rotor.

### 4.7.1 Change in height above ground

Smallie (2014) identified 5 bird species as being at most risk of collision with turbine blades at the Wolf WEF site, based on flight activity data collected on site over four seasons of pre-construction bird monitoring. These are presented in the Table to follow, with an indication of the implications of the current amendment per species.

**Table 4-1 | Top priority bird species identified by Smallie 2014. (n= number of records)**

Species	EIA finding – Smallie, 2014	Implications of proposed amendment (change in height of rotor zone only)
Rock Kestrel	The Rock Kestrel was found to fly at an average height above ground of 28m (n=14).	<u>No change</u> The new proposed turbine does not change at the lower blade tip of 30m above ground.
Jackal Buzzard	Jackal Buzzard flew at an average height of 80m (n=14), and was adjudged to be at risk of collision with turbine blades.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
Booted Eagle	Booted Eagle flew at an average height of 51m (n=9), and was adjudged to be at risk of collision with turbine blades.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
Verreaux's Eagle	Verreaux's Eagle flew at an average height above ground of 75m (n=9) and was judged to be at risk of collision.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
Pale Chanting Goshawk	Pale Chanting Goshawk flew at an average height above ground of 74m (n=4) and was judged to be at risk of collision.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
All target bird species combined (14 species)	Average flight height above ground of 52m.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.

We conclude that the possible change in turbine blade height above ground does not materially change the collision risk posed to birds, and hence would not affect our original findings.

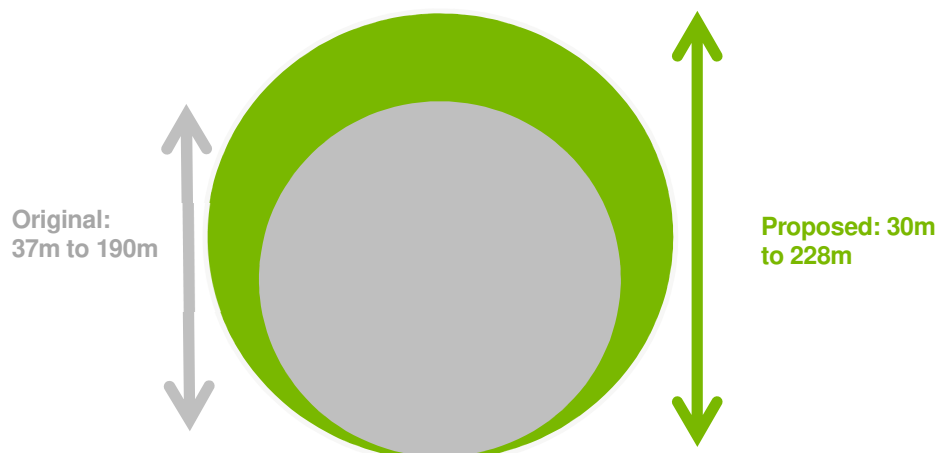
However, the conservation status of priority species identified by the original assessment have changed and mostly for the worse. Seven of the nine species have seen their conservation statuses be upgraded, that is they are now at risk of extinction. This increases the significance of any impacts on the species and has had to be considered in the reassessment of the impacts.

Subsequent to the original assessment, the 'Best Practice Guidelines for Birds and Wind Energy' have been written (2011) and updated (Jenkins *et al*, 2015). There are no new implications for the Wolf WEF project in these guidelines.

#### 4.7.2 Change in rotor size

The combined effect of original authorisation (i.e. minus four turbines) and multiple amendments to the turbine model over recent years means an overall facility increase, from an assessed collision risk window of 349,131m<sup>2</sup> to 570,604m<sup>2</sup>. This is a cumulative increase of up to 63% as explained below. If all things were equal this would imply a 63% increase in bird collision risk at the Wolf WEF site.

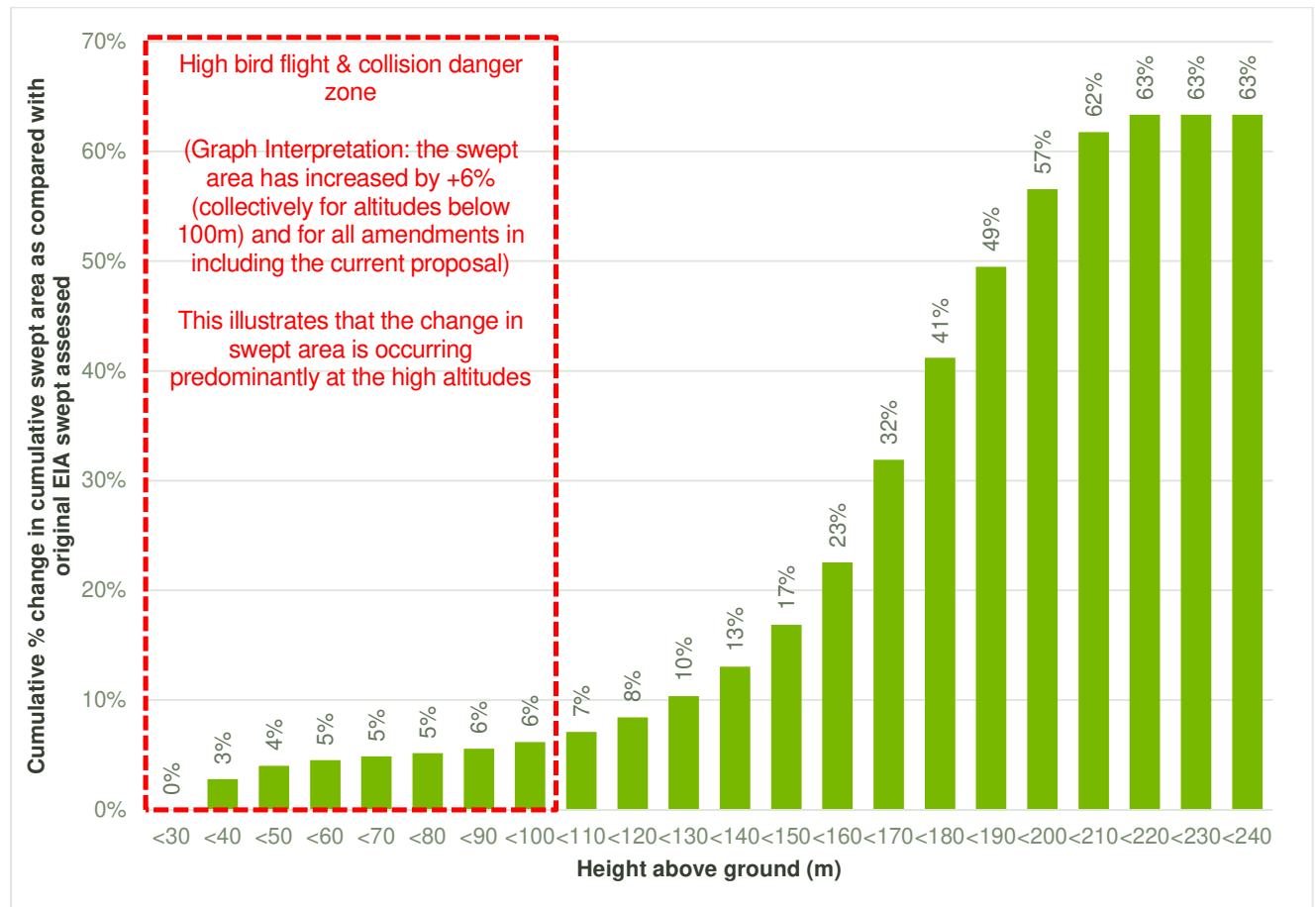
However not all factors are equal. As illustrated in Figure 4-4 below, since the lower tip height of the proposed new rotor remains relatively unchanged, most of the change in rotor swept area comes at the upper blade tip, which is above the height at which we record most bird flights. None of the priority species recorded flying on site had average flight height anywhere near the upper blade tip height of 190 to 228m (See Table 4-1). Thus, increases at the upper altitudes will not increase the collision risk.



**Figure 4-4 | Indicative diagram of the original and proposed rotor swept areas (not to scale).**

To further illustrate this point, we calculated the cumulative increase in rotor swept area at and below a given altitude (in

10m increments) as shown in Figure 4-5. This figure can be interpreted as follows: below 80m (where most recorded bird flights took place) the total change in swept area has increased by 5% (for all amendments) as compared with the assessed original. Below 150m, the total cumulative increase would amount to 17%. In other words, at the heights that we recorded relevant bird species flying, the increase in rotor swept area is fairly low when compared to the assessed original. To illustrate this, the area below 100m altitude (or 80m plus a precautionary 20m) has been marked as the high collision zone, and here we only see a cumulative 6% increase in swept area in this zone over the assessed original, despite there being a cumulative 63% increase overall.



**Figure 4-5 | Cumulative change in rotor swept area (WCS).**

We conclude then that the actual realised increase in collision risk to the relevant bird species flying on the Wolf site as a result of the current proposed amendment, considered together with the previous amendments, will not be sufficient enough to increase the significance rating from Medium (-) when considering the Worst-Case Scenario.

We have assessed a worst-case scenario with respect to turbine numbers and size. The number of turbines will most likely reduce further by the time of construction, in order to stay within the authorised 90MW for the facility. A reduction in the number of turbines would likely reduce the total swept area in the high bird collision risk altitudes, reducing the risk of bird collision. Larger turbine models could also result in the lower turbine blade tip being higher above ground than is currently proposed (30m) which would also reduce bird collision risk, as most bird flight is concentrated at the lower altitudes.

Should the number of turbines required to meet the 90 MW generation capacity be reduced to less than 21 turbines, we request that the following turbines (in order of priority) be dropped from the layout: 17; 19; 21; 22; 25; 24; 23; 27; and 28.

#### 4.7.3 Effect of Changes on Impact Significance Ratings

The original impact assessment ratings are compared against the May 2018 changes and our new assessment in the far-right hand column. It was found that the current amendments did not change any of the previous significance ratings of the original assessment.

**Table 4-2 | Comparative impact significance ratings for birds**

Impact	Original Assessment (Smallie, 2014)	Amendment II – May 2018	Current Amendment –
Habitat destruction	MEDIUM	Unchanged by proposed amendment	Unchanged by proposed amendment
Disturbance of birds	LOW	Unchanged by proposed amendment	Unchanged by proposed amendment
Displacement of birds	LOW	Unchanged by proposed amendment	Unchanged by proposed amendment
Collision of birds with turbine blades	MEDIUM	Unchanged by proposed amendment	Unchanged by proposed amendment
Collision and electrocution of birds with and on the grid connection power line	HIGH	Unchanged by proposed amendment.	Unchanged by proposed amendment.

We conclude that:

- The significance of all rated impacts remains unchanged for all assessed impacts, including bird collision risk which remains as Medium (-).
- We confirm that the revised layout does not significantly impinge the previously identified sensitive areas on site. Two turbines are slightly within the Medium sensitivity area but are for practical intents and purposes, within acceptable tolerances.

We recommend mitigation measures include:

- No turbines, other than numbers 24 and 25, should impinge the MEDIUM sensitivity areas identified by this study (these are shown in Figure 4-6 to follow). Where necessary this can be discussed further with the specialist and agreement reached.
- All electrical cables between turbines and linking turbine to the on-site substation should be placed underground.
- The power line linking the site to the Eskom grid will be above ground by necessity. The line will need to conform to all Eskom standards in terms of bird friendly pole monopole structures with Bird Perches on every pole top (to mitigate for bird electrocution), and anti-bird collision line marking devices (to mitigate for bird collision) on the earth wires of high risk sections. These sections must be identified by a suitably qualified avifaunal specialist once the final route for the line is determined. It is particularly important that the collision mitigation devices used are durable and remain in place on the line for the full lifespan of the power line. Devices must alternate between light and dark colours (to provide contrast with dark and light backgrounds) and must be installed on the full length of each span, not only the middle two-thirds as previously believed. It will be Eskom and/or Wolf WEF's responsibility to maintain these devices in effective condition for this period. Systematic patrols of this power line should be conducted during post construction bird monitoring for the wind energy facility, in order to monitor the impacts, the effectiveness of mitigation, and the durability of the mitigation measures.
- A final avifaunal walk through should be conducted prior to construction to ensure that all the above aspects have been adequately managed and to ground truth the final layout of all infrastructure. This will most likely be done as part of the site specific Environmental Management Plan. This will also allow the development of specific management actions for the Environmental Control Officer during construction, and training for relevant on-site personnel if necessary.
- The post-construction bird monitoring programme outlined by this report should be implemented by a suitably qualified and accredited avifaunal specialist. Post construction monitoring of live bird abundance and movement should be conducted for at least 1 year and carcass searches for at least 2 -3 years and repeated every 5 years thereafter. This monitoring should be done in accordance with the latest version of the best practice guidelines available at the time (Jenkins et al, 2012). This monitoring should include the grid connection power line.
- The findings of post-construction monitoring should be used to measure the effects of this facility on birds. If significant impacts are identified the wind farm operator will have to identify and implement suitable mitigation measures.
- At other operational wind farms, it has been suspected that ground burrowing small mammals such as Ground Squirrel found more favourable burrowing conditions along new road and hard stand verges on site after construction, which resulted in an inflated prey base for eagles close to turbines, and consequent higher turbine collision risk. Also – rock piles left after civil works are believed in some cases to have provided habitat for rock hyrax (dassie) close to turbines, thereby increasing collision risk for raptors. It is essential that the Wolf Wind Farm does not create favourable conditions for such mammals in high risk areas. We recommend that no rock piles be allowed to remain on the site and that all road verges, drains, and other impacted areas be sufficiently compacted to ensure that ground burrowing animals do not colonise these areas. We recommend that an avifaunal specialist conduct an inspection of these aspects at a

suitable stage during construction and at the outset of operational phase bird monitoring, and that any concerns are identified and addressed timeously by the wind farm.

- Given that the impact of bird collision with turbines could occur once the wind farm is operational and require mitigation, we recommend strongly that an appropriate mitigation budget be provided for by the developer. At this stage it is not possible to determine what mitigation may be appropriate, and in the time between writing this report and the mitigation need arising (likely several years) new mitigation methods may be developed. However, if such a need arises and suitable mitigation is identified it cannot be argued by the wind farm operator that mitigation was not budgeted for. Mitigation could cost the operator either in the form of additional costs or lost productivity as a result of changes to turbine operations. It is also important that the developer be aware that mitigation measures may require the installation of equipment on turbines, or possibly the painting of blades. Potential technical and warranty challenges should be noted throughout the planning process so that they do not prevent the implementation of mitigation if required.
- Any significant impacts detected by the operational phase bird monitoring must be mitigated where judged necessary by the avifaunal specialist. The onus is on the wind farm operator to have planned ahead for such an eventuality, particularly in respect of financial budgeting. We recommend that within the first six months of operations the site develop a 'mitigation policy' document which identifies relevant species, outlines fatality or flight activity thresholds to trigger mitigation, and potential mitigation measures.

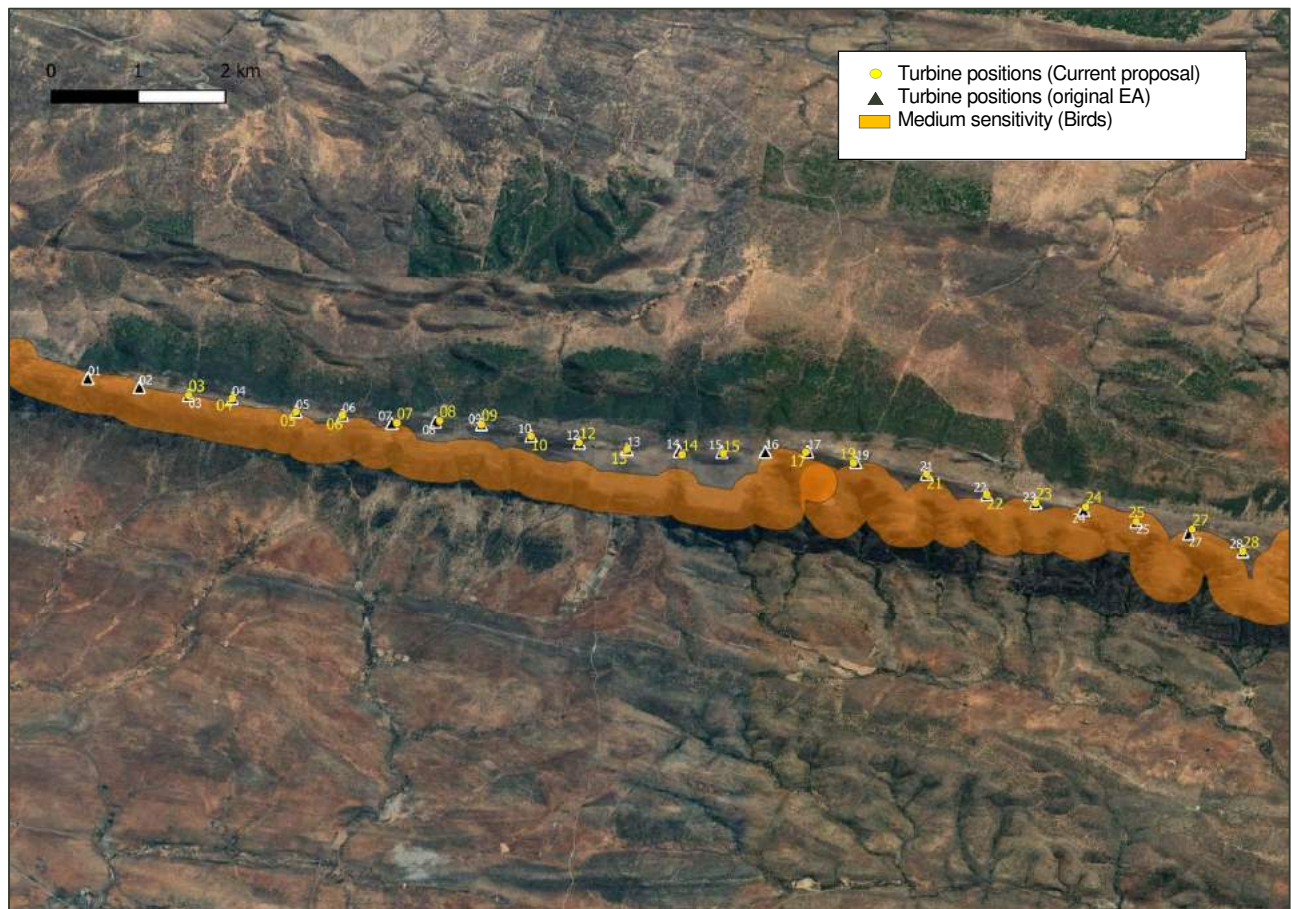


Figure 4-6 | Bird sensitive areas vs approved vs planned turbine layout

## 5 SUMMARY AND CONCLUSIONS

This assessment considered the following amendments:

1. **Tower height:** Increase turbine tower height from  $\leq 110\text{m}$  to  $\leq 135\text{m}$
2. **Rotor diameter:** Increase max Rotor diameter from  $\leq 160\text{m}$  to  $\leq 186\text{m}$
3. **Turbine numbers:** Decrease turbine positions from  $\leq 24$  to  $\leq 21^8$  (dropping turbines No. 1,2 and 16)
4. **Layout revision:** Micrositing of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout

<sup>8</sup> Note: the larger the turbine generators the fewer actual turbines will be needed to achieve the 90MW nameplate capacity, while 21 positions area being retained it is likely (particularly at the larger scales) that fewer turbines will be required to meet the 90MW project objective.

for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).

5. **Update of Applicant address** – The applicant has moved offices and these details will be amended.
6. **Update Condition 13.17:** Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the details of the current amendment

Together with the key specialist inputs, we found that the impact significance ratings for all the impacts, as compared with the original EIA, remain unchanged. Further, the assessment suggests that in this case having “fewer, larger turbines”, while having limited additional impact from a visual impact perspective, may serve to lower environmental risks to bats and birds.

The bat specialist took the opportunity to review and update the project in line with the current best practice guidelines. This resulted in expanded buffer areas (from 150m to 200m) for the identified bat sensitive areas and drove the applicant to revise the layout (micrositing 8 turbines) to limit the impingement of these areas and improving the situation from a bat impact perspective.

**The EAP finds no reason to withhold the proposed amendments and, given that amendments may provide for a new environmental best-case scenario (i.e. fewer larger turbines and an elevated average swept area) and also updates the project to current best practice protections for bats, the EAP advocates the proposed amendments.**

Since there is no change to the impact significance ratings there is no need to revise the EMPr at this time. However, since specialists have provided updated information and recommendations that should be considered in the final EMPr and layout still to be submitted for approval (as provided for under Items 12 – 16 of the original EA). We recommend the EA amendment include a condition stating that: “This authorisation amendment is subject to the inclusion and submission and approval of additional information and key recommendations provided by specialists during this amendment process that have bearing on the final EMPr and project layout.” Public Participation Process

As a Part 2 amendment in terms of the NEMA EIA regulations of 2014, this report is subject to a 30-day public participation process (PPP) to comply with Regulation 32 of the EIA Regulations (GN R 982). The aim of the PPP is to inform all potential and registered Interested and Affected Parties (I&APs) (including organs of state, which have any jurisdiction in respect of any aspect of the relevant activity and the competent authority) of the proposed amendment and associated changes in impacts and allow opportunity to comment on the application for amendment. The Registered I&APs are listed in Annexure D.1 and proof of the measures described below have been included as (Annexure E). The PPP includes the implementation of the 2014 EIA Regulations 39, 40 41, 42, 43 and 44 of the EIA Regulations 2014 and specifically the following -

- English and Afrikaans advertisement in the Graaff Reinet Newspaper notifying the public of the proposed amendments and opportunity to participate
- Notice boards erected on the site to inform immediate locals of the proposed amendment and opportunity to participate, placed at the R74 and R329 intersection, where cars travel the slowest and are most likely to see the signs;
- Copies of the report available at the Kirkwood and Jansenville Public Libraries
- Written notifications sent by email, registered and normal mail to all registered I&APs,
- Download links for the report provided in all correspondence. Download here: <https://tinyurl.com/ryyckyg>
- I&APs can request a digital copy via email from [patrick.killick@aurecongroup.com](mailto:patrick.killick@aurecongroup.com).

Upon closure of the comment period, all comments will be recorded, and responses provided where required, and this EA Amendment Report will be revised and submitted to the CA for a decision regarding the amendment. The comments and responses report (CRR) will be added as [Annexure D.3](#).

# ANNEXURE A

CORRESPONDANCE WITH CA



# ANNEXURE A.1

Copy of application form (with annexures)



# environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## APPLICATION FORM FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION

(For official use only)

File Reference Number:

NEAS Reference Number:

Date Received:

DEA/EIA/

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

### PROJECT TITLE

**EA AMENDEMENT: WOLF WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE (14-12-16-3-3-1-599)**

Indicate if the **DRAFT** report accompanies the application Yes No

### PRE-APPLICATION CONSULTATION

Was a pre-application meeting held Yes No

Date of the pre-application meeting

Reference number of pre-application meeting held

Were minutes compiled and submitted to the Department for approval Yes No

A copy of the pre-application meeting minutes must be appended to this application as **APPENDIX 1**.

### Kindly note the following:

1. This form must be used to apply for the Amendment of an Environmental Authorisation where this Department is the Competent Authority. An amendment includes:
  - a) adding, substituting, removing or changing a condition or requirement of an Environmental Authorisation, or
  - b) updating or changing any details or correcting a technical error.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. An application fee is applicable (refer to **Section 2**). Proof of payment must accompany this application. The application will not be processed without proof of payment unless one of the exclusions provided for in the Fee Regulations is applicable AND such information in the exclusion section of this application form has been confirmed by this Department.
4. A cover letter on your company letterhead indicating the nature of this application must be appended to this form i.e. new application for Environmental Authorisation, updated application for Environmental Authorisation.
5. An electronic copy (in the form of a USB) of the signed application form must be submitted together with two hardcopies (one of which must contain the original signatures of both the Applicant and EAP).
6. This form must be marked "**for Attention: Chief Director: Integrated Environmental Authorisations**" and submitted to the Department at the postal or physical addresses contained in this form.
7. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
8. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.
9. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial 10).
10. Where applicable black out the boxes that are not applicable in the form.
11. The use of the phrase "not applicable" in the form must be done with circumspection. Where it is used in respect of material information that is required by the Competent Authority for assessing the application, this may result in the rejection of the application as provided for in the Regulations.
12. Unless protected by law, all information contained in and attached to this application, will become public information on receipt by the Competent Authority. Upon request during any stage of the application process, the Applicant / EAP must provide any registered interested and affected party with the information contained in and attached to this application.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report and declaration of interest of the specialist must also be submitted.
14. Please note that this form must be copied to the relevant Provincial Environmental Department(s).
15. Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form.
16. An application for Environmental Authorisation/Amendment lapses if the applicant fails to meet any of the timeframes prescribed in terms of the EIA Regulations, 2014, as amended.
17. **Departmental Details**

<p><b>Postal address:</b>            Department of Environmental Affairs            Attention: Chief Director: Integrated Environmental Authorisations            Private Bag X447            Pretoria            0001</p> <p><b>Physical address:</b>            Department of Environmental Affairs            Attention: Chief Director: Integrated Environmental Authorisations            Environment House            473 Steve Biko Road            Arcadia</p> <p>Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:            Email: <a href="mailto:EIAAdmin@environment.gov.za">EIAAdmin@environment.gov.za</a></p>
--

**1. COMPETENT AUTHORITY**

Identified Competent Authority to consider the application:  
Reason(s) in terms of S24C of NEMA:

DEA
EA relates to Renewable Energy and was authorised by the DEA (DEA Ref. 14/12/16/3/3/1/599)

**2. FEES**

Applicants are required to tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof of payment or a motivation for exclusions must be attached as **APPENDIX 3** of this application form.

Proof of payment	✓
Exclusion applies	X

An applicant is excluded from paying fees if (a) The activity is a community-based project funded by a government grant; or (b) The applicant is an organ of state.

TYPE OF EXCLUSION	Yes / no
The activity is a community-based project funded by a government grant	X
The applicant is an organ of state	X

FEE AMOUNT	Fee
Application for an Amendment of an Environmental Authorisation	R2 000

Department of Environmental Affairs' banking details for the payment of application fees:

<p><b>Payment Enquiries:</b> Email: <a href="mailto:eiafee@environment.gov.za">eiafee@environment.gov.za</a></p> <p><b>Banking details:</b> ABSA Bank Branch code: 632005 Account number: 1044 2400 72 Current account Ref: <b>-33.255981 24.920660</b></p> <p><b>Reference number: Reference number to be provided in the specific format indicating centre point coordinates of site in decimal degrees to 5 or 6 decimal places: latitude/longitude: Centre coordinates for this application are: (-33.255981 24.920660)</b></p> <p><b>Status:</b> Tax exempted</p>
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**3. GENERAL INFORMATION**

Name of the Applicant:	Wolf Wind Farm (Pty) Ltd		
Name of contact person for applicant:	Chris Bellingham		
RSA Identity/ Passport Number:	7809035572087		
Responsible position, e.g. Director.:	Head of Project Development - Wind & Solar		
Company/ Trading name (if any):	Wolf Wind Farm (Pty) Ltd		
Company Registration Number:	2012/027727/07		
BBBEE status:	Level 4		
Physical address:	20th Floor, The Halyard, 4 Christiaan Barnard Street Foreshore Cape Town*		
Postal address:	20th Floor, The Halyard, 4 Christiaan Barnard Street Foreshore Cape Town*		
Postal code:	8001	Cell:	+24 (0) 83 443 5154
Telephone:	Work: +27 (0) 21 831 6100	Fax:	+27(0) 21 831 6199
E-mail:	bellingham@juwi.co.za		

Name of the landowner:	<h1 style="color: red; font-family: cursive;">See Appendix 4</h1>
Name of contact person for landowner:	
Postal address:	
Postal code:	
Telephone:	
E-mail:	

\*Note, this is a new physical / postal address for the applicant

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as **APPENDIX 4**.

Certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form

Provincial Environmental Authority:	Eastern Cape Department of Economic Development, Environmental Affairs and Tourism		
Name of contact person:	Dayalan Govender		
Postal address:	Private Bag X5001, Greenacres		
Postal code:	6057	Cell:	
Telephone:	041 508 5811	Fax:	
E-mail:	dayalan.govender@dedea.gov.za		

Primary Local Municipality:	DR BEYERS NAUDÉ LOCAL MUNICIPALITY (Formerly Ikwezi Local Municipality <sup>1</sup> )		
Name of env. contact person	The Municipal Manager (Dr EM Rankwana)		
Postal address:	P.O Box 71, Graaf Reinet		
Postal code:	6280	Cell:	
Telephone:	049 807 5778	Fax:	049 892 2166
E-mail:	mmoffice@bnlm.gov.za		

Second Local Municipality:	Sundays River Valley Local Municipality		
Name of env. contact person	The Municipal Manager (Mr Sidney Fadi)		
Postal address:	PO Box 47, Kirkwood,		
Postal code:	6120	Cell:	
Telephone:	042 230 7731	Fax:	042 230 0069
E-mail:	MM@Srvm.Gov.Za		

In instances where there is more than one Local/Provincial Authority involved, please attach a list of those Local/ Provincial Authorities with their contact details.

#### 4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

Company of EAP:	Aurecon South Africa (Pty) Ltd			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 1	% procurement recognition	135%
EAP name:	Patrick Killick			
EAP Qualifications:	MPhil Environmental Management			
Professional affiliation/registration:	IAIA South Africa			
Physical address:	Suite 201, 2nd Floor, Bloemhof Building, 65 York St, George, South Africa			
Postal address:	PO Box 509, George			
Postal code:	6530	Cell:		
Telephone:	044 8055432	Fax:	044 8055454	
E-mail:	Patrick.Killick@aurecongroup.com			

*The appointed EAP must meet the requirements of Regulation 13 of GN R982 of 04 December 2014, as amended.*

If appointed, the declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted or to be submitted for the purposes of the application is true and correct must be submitted as **APPENDIX 5**.

#### 5. DETAILS OF IMPLEMENTATION OF PREVIOUS ENVIRONMENTAL AUTHORISATION

Was the activity commenced with during the validity period of the environmental authorisation? If yes, please describe the implementation of the previous environmental authorisation to date:	YES	NO <input checked="" type="checkbox"/>
Not applicable		

#### 6. AMENDMENTS APPLIED FOR AND RELATED INFORMATION

Please indicate which of the following is relevant:

6.1. The holder of an environmental authorisation may at any time apply to the relevant Competent Authority for the amendment of the authorisation if:

(a) there is a material change in the circumstances which existed at the time of the granting of the environmental authorisation;	YES	NO <input checked="" type="checkbox"/>
(b) there has been a change of ownership in the property and transfer of rights and obligations must be provided for; or	YES	NO <input checked="" type="checkbox"/>
(c) any detail contained in the environmental authorisation must be amended, added, substituted, corrected, removed or updated.	YES <input checked="" type="checkbox"/>	NO

<sup>1</sup> Baviaans Local Municipality and Ikwezi Local Municipality were merged into Camdeboo Local Municipality and renamed Dr Beyers Naudé Local Municipality on 3 August 2016. Source : <https://municipalities.co.za/contacts/1013/dr-beyers-naude-local-municipality>

Describe the amendments that are being applied for:
<p>Wolf Wind Farm (Pty Ltd would like to amend the EA to make provision for the following:</p> <ol style="list-style-type: none"> <li>1. Increase tower height from <math>\leq 110\text{m}</math> to <math>\leq 135\text{m}</math></li> <li>2. Increase max Rotor diameter from <math>\leq 160\text{m}</math> to <math>\leq 186\text{m}</math></li> <li>3. decrease total turbine positions from <math>\leq 24</math> to <math>\leq 21</math></li> <li>4. Micrositing of 8 turbine positions to avoid bat sensitivities (arising from larger turbines)</li> <li>5. Change of applicant address</li> </ol>

Please provide the reasons and/or a motivation for the application for amendment:
<p>The motivation for the amendment is due mainly to market constraints and opportunities, namely:</p> <ol style="list-style-type: none"> <li>1. Market supply constraints for certain turbines including older technology (older turbines may not be available);</li> <li>2. Improved technology certified and available only after original Environmental Approval and the subsequent amendments;</li> <li>3. Unforeseen delays in Government's renewable energy procurement processes which calls for technology update;</li> <li>4. Better fit for purpose technology is available today to suit the wind resource of the site and the applicant would like to increase the wind turbine envelope to allow them to consider a broader range of manufacturers and wind turbine models which can enhance the environmental, technical and financial feasibility of the project and avoid potential implementation delays;</li> <li>5. The project must be updated according to the latest technology if it is to remain feasible and competitive against other projects being bid as part of the REIPPPP</li> </ol>

Should the amendment being requested result due to <b>6.1 (b)</b> above, you are required to furnish the Department with a written undertaking that the new holder of the environmental authorisation is willing and able to assume responsibility of the environmental authorisation issued. Provide a short motivation and explanation below:
Not applicable

## 7. ENVIRONMENTAL IMPACTS

Describe any negative environmental impacts that may occur if the application for amendment is granted, amongst others information on any increases in air emissions, waste generation, discharges to water and impacts of the natural or cultural environment must be included.
<p>A possibility exists that an increase in turbine size may affect the impact significance ratings for the following aspects and the relevant specialists have been approached. Specialists that have agreed a review is necessary:</p> <ul style="list-style-type: none"> <li>• <b>Visual</b> – The change in the turbine size and number may alter the visual impact significance.</li> <li>• <b>Bats</b> – A larger rotor diameter will result in larger swept area (per turbine) and changed swept area, which may alter the impact significance ratings on bats.</li> <li>• <b>Birds</b> - A larger rotor diameter will result in larger swept area (per turbine) and altered swept area envelope may alter the impact significance ratings on birds.</li> <li>• <b>Noise</b> –Larger turbines may alter the noise profile. (Specialist has confirmed the changes are not significant and a review is not required)</li> <li>• <b>Socioeconomic</b> – Fewer turbines may result reduce local investment and employment (Specialist confirmed the changes are not significant and a review is not required)</li> <li>• <b>Heritage</b> –Possible changes to the visual impacts may have had implications on “sense of place” (Specialist has reviewed visual specialists reports and confirms that a review would not be necessary)</li> </ul>

Describe any negative environmental impacts that may occur if the application for amendment is not granted.
Should the amendments not be granted the applicant will not be able to utilise the latest, most efficient turbines available on the market, which would render the project less competitive in REIPPPP compared to other projects that are able to utilise the latest turbine models. Should the project be uncompetitive it may not be selected as a preferred bidder in REIPPPP and the project would not be developed – and as a result the positive socio-economic benefits associated with the development (as described in detail in the final EIR Report) would be foregone.

Describe any positive environmental impacts that may occur if the application for amendment is granted, amongst others information on any reduction in the ecological footprint, air emissions, waste generation and discharges to water must be included.
The proposed larger turbine specifications will enable the applicant to utilise the latest, most efficient turbines available on the market, which will improve the energy output from the project and therefore increase both its competitiveness in the REIPPPP and the likelihood of the Project achieving the socio-economic benefits associated with the development (as described in detail in the final EIR Report).

## 8. AUTHORISATION FROM OTHER GOVERNMENT DEPARTMENTS

Are any permission, licenses or other authorisations required from any other departments before the requested amendments can be affected?	YES	NO <input checked="" type="checkbox"/>
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If yes, please complete the table below.

Name of department and contact person	Authorisation required	Authorisation applied for(Yes/ No)
NA	NA	NA

## 9. RIGHTS OR INTERESTS OF OTHER PARTIES

In your opinion, will this proposed amendment adversely affect the rights and interests of other parties? Please provide a motivation:	YES	NO <input checked="" type="checkbox"/>
The amendment would replace a 90MW wind energy facility with a 90MW wind energy facility. The size and number of turbines is unlikely to significantly affect the rights or interests of other parties as compared with the currently approved project. The scope, nature and level of impact are likely to remain same.		
NOTE: The Department is entitled to request further information if it believes it is necessary for the consideration of the application. If the application is for a substantive amendment or if the rights or interests of other parties are likely to be adversely affected, the Department will instruct the applicant to conduct a public participation process and to conduct any investigations and assessments that it deems necessary.		

10. LIST OF APPENDICES

		SUBMITTED	
		YES	NO
APPENDIX 1	Copy of the pre-application meeting minutes		NO ✓
APPENDIX 2	Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto or original commissioned Affidavit/Affirmation under oath	YES ✓	NO
APPENDIX 3	Proof of Payment / Motivation for exclusion	YES ✓	NO
APPENDIX 4	List of land owners (with contact details)	YES ✓	NO
APPENDIX 5	Declaration of independence of the EAP and undertaking under oath or affirmation, if appointed	YES ✓	NO

11. DECLARATION

I, CHRIS BELLINGHAM, declare that I will comply with all my legal obligations in terms of this application and provide accurate information to everyone concerned in respect to this application.



Signature of the Applicant:

JUWI RENEWABLE ENERGIES (PTY) LTD

Name of Company or Organisation:

4 NOVEMBER 2019

Date:

APPENDIX 1  
COPY OF THE PRE-APPLICATION MEETING MINUTES

[No Pre-application held]

**APPENDIX 2**  
**CERTIFIED COPY/IES OF THE ENVIRONMENTAL AUTHORISATION AND ALL SUBSEQUENT AMENDMENTS THERETO OR ORIGINAL**  
**COMMISSIONED AFFIDAVIT/AFFIRMATION UNDER OATH**





## 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

**NEAS Reference:** DEA/EIA/0002140/2014

**DEA Reference:** 14/12/16/3/3/1/599

**Enquiries:** Mr Jay-Jay Mpelane

**Telephone:** 012-399-9404 **E-mail:** jmpelane@environment.gov.za

Mr Chris Bellingham  
Juwi Renewable Energies (Pty) Ltd  
22 Floor Cape Town Met Life Centre  
No.7 Coen Steytler Avenue  
Roggebaai  
**CAPE TOWN**  
8001

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

Tel number: 021-831-6131  
E-mail address: [bellingham@juwi.co.za](mailto:bellingham@juwi.co.za)

**CERTIFIED A TRUE COPY OF THE ORIGINAL**

### PER EMIAL / MAIL

Dear Mr Bellingham

### **ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 543, 544, 545, AND 546: FOR THE CONSTRUCTION OF A WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE**

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

In terms of Regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) 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 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

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

M.S

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 or fax number. Mr Hassam can also be contacted at:

Telephone number: 012-399-9356/9355  
Email address: [AppealsDirectorate@environment.gov.za](mailto:AppealsDirectorate@environment.gov.za)

The authorised activities must not commence within twenty (20) days of the date of signature of the authorisation. Further, 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.

Yours sincerely

  
**Mr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**  
Date: 14/9/2015

cc:	Mr Patrick Killick	Aurecon consultant	Tel: 044 805 5454	Email: Patrick.Killick@aurecongroup.com
	Mr Gerry Pienaar	EC: DEDEAT	Tel: 043 605 7051	Email: Gerry.pienaar@deaet.ecape.gov.za
	Mr Thembani Gutas	Ikwezi Local Municipality	Tel: 049 836 0021	Email: registry@ikwezimunicipality.co.za
	Mr Lonwabo Ngoqo	Kirkwood Local Municipality	Tel: 042 230 7728	Email: lonwabo@srvm.gov.za

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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**APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R. 543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)**

<b>APPLICANT</b>	<b>INTERESTED AND AFFECTED PARTIES (IAPs)</b>
1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs [DEA]).	1. Receive EA from Applicant/Consultant.
2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2. N/A.
3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Environmental Affairs (the Minister).	3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Environmental Affairs (the Minister).
4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice.	4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice.
5. The Applicant must also serve on each IAP: <ul style="list-style-type: none"> <li>• a notice indicating where and for what period the appeal submission will be available for inspection.</li> </ul>	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, <ul style="list-style-type: none"> <li>• a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.</li> </ul>
6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

**NOTES:**

**1. An appeal must be:-**

- a) submitted in writing;
- b) accompanied by:
  - a statement setting out the grounds of appeal;
  - supporting documentation which is referred to in the appeal; and
  - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## Environmental Authorisation

In terms of regulation 36 of the Environmental Impact Assessment Regulations, 2010

**CONSTRUCTION OF A WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR  
WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY  
IN THE EASTERN CAPE PROVINCE  
CACADU DISTRICT MUNICIPALITY**

<b>Authorisation register number:</b>	<i>14/12/16/3/3/2/599</i>
<b>NEAS reference number:</b>	<i>DEA/EIA/0002140/2014</i>
<b>Last amended:</b>	<i>First issue</i>
<b>Holder of authorisation:</b>	<i>Juwi Renewable Energies (Pty) Ltd</i>
<b>Location of activity:</b>	<i>Eastern Cape Province: near Wolwefontein within the Ikwezi Local Municipality.</i>

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.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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Ms

## 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 authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA Regulations, 2010.

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 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

### JUWI RENEWABLE ENERGIES (PTY) LTD

with the following contact details –

Mr Chris Bellingham  
Juwi Renewable Energies (Pty) Ltd  
22 Floor Cape Town Met Life Centre  
No.7 Coen Steytler Avenue  
Roggebaai  
**CAPE TOWN**  
8001

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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Tel number: 021 831 6131  
Cell number: 082 329 7383  
E-mail address: [bellingham@juwi.co.za](mailto:bellingham@juwi.co.za)

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1, 2 or 3 (GN R. 544, 545 & 546):

Listed activities	Activity/Project description
<p><b><u>GN R. 544 Item 10:</u></b>                      The construction 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.</p>	<p>A 132kV transmission line is proposed to evacuate electricity generated by the Wolf Wind Farm and will run from the onsite substation to the Wolf Substation which forms part of the national grid.</p>
<p><b><u>GN R. 544 Item 11:</u></b>                      The construction of,                      (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p>	<p>Drainage lines occur on the proposed site and one or more roads are likely to cross these watercourses. The access roads will likely follow the watersheds, for ease and robustness of design and thus impacts to surface water resources should be minimal.</p>
<p><b><u>GN R. 544 Item 18:</u></b>                      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 grit, pebbles or rock from:                      (i) a watercourse.</p>	<p>The infilling or depositing of any material of more than 5 cubic metres into a watercourse may be triggered with the construction of internal service roads where these roads crosses drainage lines or watercourses.</p>
<p><b><u>GN R. 544 Item 22:</u></b>                      The construction of a road, outside urban areas,                      (ii) where no reserve wider exists where the road is wide than 8metres.</p>	<p>Although site roads are planned to be 7m wide for the most part at certain road sections the verges (or cut-to-fill) might increase the actual width to over 8m and thus this activity is applied for.</p>
<p><b><u>GN R. 545 Item 1:</u></b>                      The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more.</p>	<p>The proposed WEF would have a generation capacity of 84MW in total.</p> <p style="text-align: right;">Sakshna Singh                      Commissioner of Oaths                      Non - Practising Attorney                      24<sup>TH</sup> Floor Metropolitan Building                      07 Walter Sisulu Avenue, Foreshore                      Cape Town, 8001</p>

Listed activities	Activity/Project description
<p><b><u>GN R. 545 Item 15:</u></b>                      Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more-</p>	<p>The approximate extent of the undeveloped land that would be physically altered is estimated at 61ha in extent.</p>
<p><b><u>GN R. 546 Item 4:</u></b>                      The construction of a road wider than 4 metres with a reserve less than 13,5 metres.                      (a) In <b>Eastern Cape province</b>,                      (ii) Outside urban areas, in:                      (ee) Critical biodiversity areas identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans,                      (gg) Areas within 10kilomotres from sites or 5kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve.</p>	<p>The construction of a road wider than 4 metres with a reserve less than 13,5 metres will be required outside urban areas in the CBAs as identified in systematic biodiversity plans (Eastern Cape Biodiversity Conservation Plan Technical Report, 2007).</p> <p style="text-align: right;">                         Sakshna Singh                          Commissioner of Oaths                          Non - Practising Attorney                          24<sup>th</sup> Floor Metropolitan Building                          07 Walter Sisulu Avenue, Foreshore                          Cape Town, 8001                     </p> <p style="text-align: right;"><b>CERTIFIED A TRUE COPY OF THE ORIGINAL</b></p>
<p><b><u>GN R. 546 Item 12:</u></b>                      The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation,                      (b) Within critical biodiversity areas identified in bioregional plans.</p>	<p>The turbines and associated infrastructure including 7m wide access roads will trigger this activity because the area to be cleared would exceed 300m2 of vegetation where 75% or more of the vegetation cover constitutes indigenous vegetation within a CBA as identified in the Eastern Cape Biodiversity Conservation Plan Technical Report (2007).</p>
<p><b><u>GN R. 546 Item 13:</u></b>                      The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.                      (a) Critical biodiversity areas and ecological</p>	<p>The turbines and associated infrastructure including 7m wide access roads will trigger this activity because the area to be cleared would 1 hectare where 75% or more of the vegetation cover constitutes indigenous vegetation and is</p>

Listed activities	Activity/Project description
<p>support areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans,</p> <p>(c) In <b>Eastern Cape province:</b></p> <p>(ii) Outside urban areas, the following,</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</p>	<p>outside urban areas within a CBA as identified in the Eastern Cape Biodiversity Conservation Plan Technical Report (2007).</p>
<p><b><u>GN R. 546 Item 14:</u></b></p> <p>The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</p> <p>(a) In <b>Eastern cape province:</b></p> <p>(i) All areas outside urban areas.</p>	<p>A vegetated area is estimated at 60.66ha or more would be cleared for the proposed project, which is located in a rural area. The vegetation comprises of 75% or more indigenous vegetation.</p>
<p><b><u>GN R. 546 Item 16:</u></b></p> <p>The construction of,</p> <p>(iv) Infrastructure covering 10 square metres or more, where such construction occurs within a water course or within 32 metres of a watercourse, measured from the edge of a watercourse.</p> <p>(a) In <b>Eastern cape province,</b></p> <p>(ii) Outside urban areas, in:</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans,</p> <p>(gg) Areas within 10kilometres from national parks or world heritage sites or</p>	<p>The infilling or depositing of any material of more than 10m<sup>2</sup> into watercourse will be triggered with the construction of internal service roads where these roads cross drainage lines or watercourses. The road is located in a rural area Eastern Cape in CBAs or ecosystem service areas as identified in systematic biodiversity plans (Eastern Cape Biodiversity Conservation Plan Technical Report, 2007.</p> <p>Sakshna Singh        Commissioner of Oaths        Non - Practising Attorney        24<sup>TH</sup> Floor Metropolitan Building        07 Walter Sisulu Avenue, Foreshore        Cape Town, 8001</p> <p><b>CERTIFIED A TRUE COPY OF THE ORIGINAL</b></p>



Listed activities	Activity/Project description
5kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve.	
<p><b><u>GN R. 546 Item 19:</u></b></p> <p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>(a) <b>In Eastern Cape province:</b></p> <p>(iii) Outside urban areas, in:</p> <p>(ee) Critical biodiversity areas identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans,</p> <p>(gg) Areas within 10kilomotres from sites or 5kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve.</p>	Widening existing farm roads to 7m or more in a CBA as identified in Eastern Cape Biodiversity Conservation Plan Technical Report, 2007. The road upgrades will occur within 10kms of the Addo Park.

as described in the amended Environmental Impact Assessment Report dated 26 June 2012 at:

Centre co-ordinates for Wind Energy Farm	Latitude	Longitude
	33°15'21.60'S	24°55'10.03'E
<b>Preferred Alternative 1 (transmission line)</b>		
Starting point of activity	33°15'22.27'S	24°55'13.53'E
Middle point of activity	33°18'38.80'S	24°54'25.53'E
End point of activity (TM2)	33°21'8.05'S	24°52'0.71'E

- for the proposed construction of the Wind Energy Facility with a generation capacity of up to 84MW and its associated infrastructure near Wolwefontein within the Ikwezi Local Municipality in the Eastern Cape Province, hereafter referred to as "the property".

The infrastructure associated with this facility includes:

- A site access road ,
- Security fencing and access gate,
- New and upgraded site service roads,

Sakshna Singh  
 Commissioner of Oaths  
 Non - Practising Attorney  
 24<sup>TH</sup> Floor Metropolitan Building  
 07 Walter Sisulu Avenue, Foreshore  
 Cape Town, 8001

- Stormwater controls measures associated with all roads,
- 24 wind turbines,
- A new on site substation,
- Underground electrical cabling, between turbines and onsite substation, and
- A new 132kV overhead transmission line connecting to the existing Wolf Substation.

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The preferred Alternative 1 (transmission line) and location site alternative are approved.
2. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. 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.
4. The activities authorised must only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this 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 authorisation in terms of the regulations.
6. This activity must commence within a period of five (5) years from the date of issue of this 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.
7. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
8. The holder of an environmental authorisation must notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney

  
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7  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

### Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
  - 10.1. specify the date on which the authorisation was issued;
  - 10.2. inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment Regulations, 2010;
  - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 10.4. give the reasons of the competent authority for the decision.
11. The holder of the authorisation must publish a notice –
  - 11.1. informing interested and affected parties of the decision;
  - 11.2. informing interested and affected parties where the decision can be accessed; and
  - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in the newspaper(s) contemplated and used in terms of regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

### Management of the activity

12. A copy of the final site layout plan must be submitted to the Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout plan.
13. The site layout plan must indicate the following:
  - 13.1. Turbine positions;
  - 13.2. Foundation footprint;
  - 13.3. Permanent lay down area footprint;
  - 13.4. Construction period lay down footprint;
  - 13.5. Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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- 13.6. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
  - 13.7. The location of heritage sites;
  - 13.8. Sub-station(s) and/or transformer(s) sites including their entire footprint;
  - 13.9. Cable routes and trench dimensions (where they are not along internal roads);
  - 13.10. Connection routes (including pylon positions) to the distribution/transmission network;
  - 13.11. Cut and fill areas at turbine sites along roads and at sub-station/transformer sites indicating the expected volume of each cut and fill;
  - 13.12. Borrow pits;
  - 13.13. Spoil heaps (temporary for topsoil and subsoil and permanently for excess material);
  - 13.14. All existing infrastructure on the site, especially roads;
  - 13.15. Buildings including accommodation;
  - 13.16. All "no-go" areas,
  - 13.17. A map combining the final layout plan superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of turbines as stated in the amended EIR dated 26 June 2015 and this authorisation.
14. The applicant must appoint a qualified botanical and fauna specialist to ground-truth every footprint and their recommendation must inform the final layout of the wind energy facility and EMPr to be submitted to the department for approval.
15. The revised Environmental Management Programmes (EMPr) submitted as part of the application for environmental authorisation is **not approved** and must be amended and submitted with the abovementioned layout plan to the Department for written approval prior to commencement of the activity.
16. The EMPr amendments must include the following:
- 16.1. All recommendations and mitigation measures recorded in the amended EIR dated 26 June 2015 and EIR dated 11 February 2015.
  - 16.2. The requirements and conditions of this authorisation.
  - 16.3. 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 ECO and be implemented prior to commencement of the construction phase.
  - 16.4. An open space management plan to be implemented during the construction and operation of the facility.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walker Siculu Avenue, Foreshore  
Cape Town, 8001

  
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- 16.5. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility including timeframes for restoration which must indicate rehabilitation within the shortest possible time 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.
- 16.6. 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.
- 16.7. A storm 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 appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and sub-surface flows. Drainage measures must promote the dissipation of storm water run-off.
- 16.8. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- 16.9. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- 16.10. A transportation plan for the transport of turbine components, main assembly cranes and other large pieces of equipment.
- 16.11. A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
- 16.12. An avifauna and bat monitoring programme to document the effect of the operation of the wind energy facility on avifauna and bats. This must be compiled by a qualified specialist.
- 16.13. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.

Sakina Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building

10 07 Walter Sisulu Avenue, Foreshore  
Cape Town

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- 16.14. Measures to protect hydrological features such as streams, rivers, pans, wetlands, and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
17. The approved EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
18. The provisions of the approved EMPr shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.

### Monitoring

19. The applicant must appoint a suitably experienced independent Environmental Control Officer (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 authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- 19.1. The ECO must be appointed prior commencement of any authorised activities.
- 19.2. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
- 19.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 19.4. A detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register must be kept on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
- 19.5. In addition the ECO must maintain the following on site:
- A weekly site diary;
  - Copies of all reports submitted to the Department; and
  - A schedule of current site activities including the monitoring of such activities.
- 19.6. 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.
- 19.7. 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.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney

24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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### Recording and reporting to the Department

20. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the *Director: Compliance Monitoring* at the Department.
21. The holder of the authorisation must submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.
22. The environmental audit report must:
  - 22.1. Be compiled by an independent environmental auditor;
  - 22.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
  - 22.3. Evaluate compliance with the requirements of the approved EMP and this environmental authorisation;
  - 22.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
  - 22.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period; and
  - 22.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
  - 22.7. The audit report must be submitted prior to commencement of the operation phase of the project.

### Commencement of the activity

23. The authorised activity must not commence within twenty (20) days of the date of signature of the authorisation.
24. 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 may not commence with the activity until such time that the appeal has been finalised.

### Notification to authorities

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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25. Fourteen (14) days written notice must be given to the Department that the activity will commence. 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. This notification period may coincide with the notice of intent to appeal period.

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

26. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.

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

27. Should the activity ever cease or become redundant, the applicant shall 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**

28. Should any historical, cultural, paleontological resources and graves being found during the construction of the project, all construction activities must be suspended and Eastern Cape Provincial Heritage Resources Authority together with the heritage specialists who surveyed and compiled HIA reports must be alerted so that the find can be investigated and mitigation measures proposed.
29. A bird and bat monitoring programme must be implemented to document the effect of the operation of the wind energy facility on avifauna and bats. This must commence prior to construction, and continue during operation of the wind energy facility.
30. Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal corridors. 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. Flappers must be fitted in place so that they do not drift along the line and be readily and cost effectively installed on, or removed from the existing lines.
31. 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 quarterly basis. The report will assist all stakeholders in identifying potential and additional

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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- mitigation measures and to establish protocols for a bird monitoring programme for wind energy development in the country.
32. The baseline data collected and documented during the survey must be shared with the EWT and Birdlife South Africa for a better understanding of the distribution or breeding behaviour of any of the priority species.
  33. The applicant must ensure that all the "No-go" areas are clearly demarcated (using fencing and appropriate signage) before construction commences.
  34. The applicant must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and reasonable measures to limit noise from the work site are implemented.
  35. 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.
  36. The applicant must obtain a written permit or 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. The approval/permit must be submitted to the Director: Integrated Environmental Authorisations.
  37. Areas around fuel tanks must be banded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
  38. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
  39. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
  40. The applicant must ensure that poaching, hunting and killing of animals on site during construction phase of the project is strictly not allowed under any circumstance. In addition, firearms or any other hunting weapons must not be permitted on site.
  41. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal.
  42. Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
  43. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan their activities.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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## General


44. A copy of this authorisation and the approved EMPr must be kept at the property where the activity/ will be undertaken. The authorisation and approved EMPr must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
45. The holder of the authorisation must notify both the *Director: Strategic Infrastructure Developments* and the *Director: Compliance Monitoring* at the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
46. 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 applicant or his 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 applicant 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: 14/09/2015

  
Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations  
Department of Environmental Affairs

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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## 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 information contained in the EIR dated 11 February 2015 and the amended EIR dated 26 June 2015;
- b) The comments received from the Department of Rural Development and Agrarian Reform, Eskom, Eastern Cape Provincial Heritage Resources Authority (EC PHRA), Department of Water and Sanitation, in the amended EIR dated 26 June 2015 as well as interested and affected parties as included in the EIR;
- c) Mitigation measures as proposed in the EIR dated 11 February 2015 and the amended EIR dated 26 June 2015;
- d) The information contained in the specialist studies contained within Appendix E of the EIR;
- e) Findings of the site visit conducted on 01 April 2015; and
- f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

### 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) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed construction of the Wind Energy Facility with a generation capacity of up to 84MW and its associated infrastructure near Wolwefontein within the Ikwezi Local Municipality in the Eastern Cape Province.
- c) The EIR dated 11 February 2015 and the amended EIR dated 26 June 2015 identified all legislation and guidelines that have been considered in the preparation of the EIR.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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- d) The methodology used in assessing the potential impacts identified in the EIR dated 11 February 2015 and the amended EIR dated 26 June 2015 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 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 EIR dated 11 February 2015 and amended EIR dated 26 June 2015 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) The information contained in the EIR dated 11 February 2015 and amended EIR dated 26 June 2015 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIR 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 environmental authorisation is accordingly granted.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
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## 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: 14/12/16/3/3/2/599/AM1

Enquiries: Mr Muhammad Essop

Telephone: (012) 399 9406 E-mail: MEssop@environment.gov.za

Mr Chris Bellingham  
Wolf Wind Farm (Pty) Ltd  
24<sup>th</sup> Floor Cape Town Met Life Centre  
No. 7 Walter Sisulu Avenue  
Foreshore  
**CAPE TOWN**  
8001

Telephone Number: (021) 831 6130  
Email Address: bellingham@juwi.co.za

### PER EMAIL / MAIL

Dear Mr Bellingham

### AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 14 SEPTEMBER 2015 FOR THE CONSTRUCTION OF A WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE INKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the abovementioned application by this Department on 14 September 2015, your application for amendment of the EA received on 19 May 2016, the acknowledgement letter dated 23 May 2016, the draft report received on 21 June 2016 and 25 July 2016, the comments issued by this Department on 27 July 2016 and the additional information received on 04 August 2016 refer.

The applicant wishes to amend the EA for the abovementioned project as follows:

- Change the holder of the EA from Juwi Renewable Energies (Pty) Ltd to Wolf Wind Farm (Pty) Ltd;
- Change the contact details of the holder of the EA;
- Increase the generation capacity from 84MW to 90MW; and,
- Increase the rotor diameter from 126m to 137m.

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, has decided to amend the EA dated 14 September 2015 as follows:

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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**Amendment 1: Amendment to the holder of the EA:**

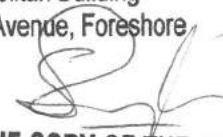
**From:**

"Juwi Renewable Energies (Pty) Ltd"

Represented by: Mr Chris Bellingham  
22 Floor Cape Town Met Life Centre  
No 7 Coen Steyler Avenue  
Roggebaai  
**CAPE TOWN**  
8001

Telephone Number: (021) 831 6131  
Cell Number: (082) 329 7383  
Email Address: [bellingham@juwi.co.za](mailto:bellingham@juwi.co.za)

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001



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**To:**

"Wolf Wind Farm (Pty) Ltd"

Represented by: Mr Chris Bellingham  
24<sup>th</sup> Floor Cape Town Met Life Centre  
No 7 Walter Sisulu Avenue  
Foreshore  
**CAPE TOWN**  
8001

Telephone Number: (021) 831 6130  
Fax Number: (021) 831 6199  
Cell Number: (083) 443 5154  
Email Address: [bellingham@juwi.co.za](mailto:bellingham@juwi.co.za)

The applicant applied to change the holder and the contact details of the holder of the EA as it has changed since the EA was issued. This is a Part 1 amendment and has no change on scope and is hereby granted.

**Amendment 2: Amendment to the project description of the EA:**

The applicant wishes to amend the EA for the abovementioned project as follows:

- Increase the generation capacity from 84MW to 90MW; and,
- Increase the rotor diameter from 126m to 137m.

Based on a review of the application for amendment as indicated above and the supporting documentation to amend the above EA, this Department, in terms of Regulation 33(1) of the Environmental Impact Assessment Regulations, 2014, has decided **not to amend** the EA dated 14 September 2015. The reasons for the decision are provided below:

This Department acknowledged receipt of the application for amendment on 23 May 2016 stating that the amendment falls within the ambit of an amendment to be applied for in terms of Part 2 Chapter 5 of the EIA Regulations, 2014.



Regulation 32(1)(a) of the EIA Regulations, 2014 states that "The holder must-  
(a) within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority a report, reflecting-....."

which report-

- (i) had been subjected to a public participation process, which had been agreed to by the competent authority, and which was appropriate to bring the proposed change to the attention of potential and registered interested and affected parties, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority, and
- (ii) reflects the incorporation of comments received, including any comments of the competent authority; or....."

As such, it must be noted that the Environmental Assessment Practitioner (EAP) did not agree with the Competent Authority as to the method of the Public Participation Process (PPP) to be followed. This Department provided comments on 27 July 2016 indicating that the PPP must be conducted in terms of Regulation 39, 40 41, 42, 43 and 44 of the EIA Regulations 2014 and proof of compliance, such as newspaper adverts, site notice etc. is to be included in the final report.

The EAP in the final report stated that the PPP followed are as follows:

- Made the draft report available for a 30 day review period from 23 June 2016 to 25 July 2016;
- Copies of the report were available at the Kirkwood Public Library and Jansenville Public Library;
- Written notification sent by email, registered and normal mail to all registered I&APs, the emails include a copy of the Report; and
- The Amendment Report can be downloaded from the Aurecon Website.

The final report also does not make reference or provide motivation why there was a deviation from the requirements of the PPP as outlined in the EIA regulation, 2014. As such, the requirements of the EIA Regulations, 2014 as well as comments raised within the EIA process has not been adequately dealt with.

Should you wish to proceed with the proposed development as outlined in the application for amendment, the applicant is required to lodge a new application for amendment under the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations applicable at the time, and obtain environmental approval **prior** to implementing the proposed amendments.


Please note that the Department's templates have been amended. You are therefore requested to complete and submit the new application form which can be downloaded on the following link <https://www.environment.gov.za/documents/forms>.

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 Department's decision in respect of the amendment made 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. Kindly include a copy of this document with the letter of notification to interested and affected parties.

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 applicant by the competent authority.

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001



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

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

**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)).

Yours faithfully



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

Date: 17/11/2015

cc:	Mr Patrick Killick	Aurecon South Africa (Pty) Ltd	Email: Patrick.killick@aurecongroup.com
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Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001



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## 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: 14/12/16/3/3/2/599/AM3

Enquiries: Constance Musemburi

Telephone: (012) 399 9416 E-mail: cmusemburi@environment.gov.za

Mr Chris Bellingham  
Wolf Wind Farm (Pty) Ltd  
24<sup>th</sup> Floor Cape Town Met Life Centre  
No. 7 Walter Sisulu Avenue  
Foreshore  
**CAPE TOWN**  
8001

Telephone Number: (021) 831 6130  
Email Address: [bellingham@juwi.co.za](mailto:bellingham@juwi.co.za)

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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### **PER EMAIL / MAIL**

Dear Mr Bellingham

### **AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 14 SEPTEMBER 2015 FOR THE CONSTRUCTION OF A WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE INKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE.**

The Environmental Authorisation (EA) issued for the abovementioned application by this Department on 14 September 2015, your application for amendment of the EA and the final reports received by the Department on 29 May 2017 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 14 September 2015 as follows:

#### **Amendment relates to the project description of the EA:**

- The generation capacity is herewith increased from 84MW to 90MW; and
- The rotor diameter is herewith increased from 126m to 137m.

#### **Reasons for the amendment**

The increase in generation capacity and the rotor diameter is required to cater for the improved technology available to suit the wind resource site and to allow the applicant to consider a broader range of manufactures and wind turbine models which can enhance both environmental, technical and financial feasibility of the project and avoid potential implementation delays. The overall turbine tip height remains unchanged at 163m.

This letter must be read in conjunction with the EA dated 14 September 2015.

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 Department's decision in respect of the amendment made as well as the provisions regarding the submission of appeals that are contained in the Regulations.

*MS*

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:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: [appealsdirector@environment.gov.za](mailto:appealsdirector@environment.gov.za):

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

**By post:** Private Bag X447,  
Pretoria,  
0001

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](https://www.environment.gov.za/documents/forms#legal_authorisations) or request a copy of the documents at [appealsdirector@environment.gov.za](mailto:appealsdirector@environment.gov.za).

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: 14/09/2017

cc:	Mr Patrick Killick	Aurecon South Africa (Pty) Ltd	Email: <a href="mailto:Patrick.killick@aurecongroup.com">Patrick.killick@aurecongroup.com</a>
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Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
**CERTIFIED A TRUE COPY OF THE ORIGINAL**



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House· 473 Steve Biko, Arcadia· PRETORIA

DEA Reference: 14/12/16/3/3/2/599/AM4

Enquiries: Ms Mmamohale Kabasa

Telephone: (012) 399 9420 E-mail: MKabasa@environment.gov.za

Mr Chris Bellingham  
Wolf Wind Farm (Pty) Ltd  
24<sup>th</sup> Floor Cape Town Met Life Centre  
No. 7 Walter Sisulu Avenue  
CAPE TOWN  
8001

Telephone Number: (021) 831 6130  
Email Address: bellingham@juwi.co.za

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

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PER EMAIL / MAIL

Dear Mr Bellingham

### **AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 14 SEPTEMBER 2015, AS AMENDED, FOR THE 90MW WOLF WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR THE TOWN OF WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE PROVINCE**

The Environmental Authorisation (EA) issued for the above application by this Department on 14 September 2015, the amendments to the EA approved on 17 November 2016 and 14 September 2017 respectively, your application for amendment to the EA received by this Department on 06 June 2018, the comments issued by this Department on 03 August 2018 and the final report received on 10 August 2018, 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 (EIA) Regulations, 2014, as amended, has decided to amend the EA dated, 14 September 2015 as amended as follows:

#### **Amendment 1: Amendment to the project description of the EA as amended:**

The project description as outlined in the amendment to the EA dated 14 September 2017:

- "The rotor diameter is herewith increased from 126m to 137m"

#### **is hereby amended to:**

- The rotor diameter is herewith increased from 137m to  $\leq 160m$ ; and
- The turbine tower hub is herewith increased from  $\leq 100m$  to  $\leq 110m$ "

The applicant applied to change the turbine specifications due to improved technology advancement since the issue of the initial EA. The applicant would like to increase the wind turbine envelope to allow them to consider a broader range of manufacturers and wind turbine models which can enhance the environmental, technical and financial feasibility of the project and avoid potential implementation delays.

M-S

**Amendment 2: Amendment to extend the validity period of the EA:**

*The activity must commence within a period of five (05) years from the date of expiry of the EA issued on 14 September 2015 as amended (i.e. the EA lapses on 14 September 2025). 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."*

The applicant intends to bid the project into future rounds of the REIPPP Programme, the timing of which is unconfirmed at this time.

**The following conditions are hereby included into the EA dated 14 September 2015 as amended:**

43.A. *"Should the applicant opt to use a turbine model with a sound power emissions level higher than 110dBA; the applicant must appoint a qualified noise specialist to revise the facility's noise model, advice on turbines micro-sitting and propose additional mitigation measures for inclusion into the EMP, if any."*

43.B. *"The layout to be submitted to the Department for approval as per Condition 12 of the EA issued on 14 September 2015 must comply with the latest Eskom requirements for work in or near Eskom servitudes and Eskom Guidelines for Renewable Energy Generation Plant Setbacks to Eskom Infrastructure."*

This letter must be read in conjunction with the EA dated 14 September 2015 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 stipulates 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 abuses or compromises 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 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 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe 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: [appealsdirector@environment.gov.za](mailto:appealsdirector@environment.gov.za);

Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>th</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001

  
**CERTIFIED A TRUE COPY OF THE ORIGINAL**

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.

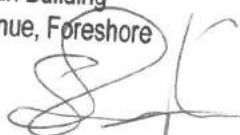
To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at [https://www.environment.gov.za/documents/forms#legal\\_authorisations](https://www.environment.gov.za/documents/forms#legal_authorisations) or request a copy of the documents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

Yours faithfully

  
Mr Sabelo Malaza  
Chief Director: Integrated Environmental Authorisations  
Department of Environmental Affairs  
Date: 26/11/2018

cc:	P Killick	Aurecon South Africa (Pty) Ltd	Email: Patrick.killick@arecongroup.com
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Sakshna Singh  
Commissioner of Oaths  
Non - Practising Attorney  
24<sup>TH</sup> Floor Metropolitan Building  
07 Walter Sisulu Avenue, Foreshore  
Cape Town, 8001



**CERTIFIED A TRUE COPY OF THE ORIGINAL**

**APPENDIX 3  
PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION**



Advice sending date: 01 Nov 2019

Advice reference no: GLVB01087856

Payment Advice

Page: 1/1

Recipient's name and contact information:

Mrs Christelle Fourie  
christelle.fourie@juwi.co.za

Transaction type: ACH credits

Beneficiary name:	DEPT OF ENVIRONMENTAL AFPA	Amount:	ZAR2,000.00
Beneficiary's bank:	ABSA BANK LTD	Value date:	01 Nov 2019
	South Africa	Remitter's name:	Juwi RE Pty Ltd
Beneficiary account number:	10442***** (Part of the account number is shown as ***** for security reasons.)	Remitting bank:	HSBC Bank PLC Johannesburg Branch
Customer reference:	Dept of environmental af	Instruction reference:	78845LL024U5
2nd party reference:	33 255981 24 920660		

Remitter to beneficiary information:  
<No details are provided>

Important notes:

This Advice is issued at the request of our customer. It purports to set out certain details of the transaction that our Bank was instructed to effect. This is NOT a confirmation that the transaction has been or will be effected. You should conduct your own verification and confirmation regarding the information set out in this Advice including, without limitation, the status of the transaction mentioned in it. This Advice is for your reference only and is not to be relied upon by you or any one for any purpose. We have not verified the content of this Advice and bear no responsibility therefor. Where this Advice is sent by facsimile or over the internet, you should take note that communication by facsimile or over the internet may be interrupted, delayed or fail. In particular, e-mail messages sent via the internet cannot be guaranteed to be secure, error or virus-free as information could be intercepted, corrupted, lost, arrive late or contain viruses. The Bank shall bear no liability whatsoever for any direct, indirect or consequential loss arising out of this Advice being sent by facsimile or over the internet whether caused by the Bank or other third parties. The information contained in this Advice is confidential. It may also be legally privileged. If you are not the addressee you may not copy, forward, disclose or use any part of it.

**APPENDIX 4  
LIST OF LAND OWNERS**

Properties affected by the WEF (As approved)			
Landowner 1:	Hartebeestefontein 15/RE (and potentially 15/4 and a revised remainder which are unregistered subdivisions that can be registered at the Deeds Office at any time)		
Contact person:	Christie Beets		
Postal address:	PO Box 6097, Moselville, 6232		
Telephone:		Cell:	049 8380047 only after 8pm
E-mail:		Fax:	
Landowner 2:	Hartebeestefontein 15/2 (and potentially 15/3 which is an unregistered consolidation of 15/2 and 15/1 that can be registered at the Deeds Office at any time)		
Contact person:	Stephnus Scheepers		
Postal address:	P.O box 53, Patensie, 6335		
Telephone:		Cell:	082 8752398
E-mail:	stephnus@scheyisa.net	Fax:	
Landowner 3:	Koffylaagte 304 & Paardeberg North 285/RE		
Contact person:	Cem Kumral (Koffylaagte Game Lodge CC)		
Postal address:	14 Strandview Mansions, Marine Drive, Port Elizabeth, 6001		
Telephone:	049 836 9188	Cell:	083 357 0162
E-mail:	cemkumral@mweb.co.za	Fax:	
Landowner 4:	Paardeberg North (Jackals Vlei) 285/2		
Contact person:	Danie Stander (previously Blue Age Prop 21 Pty. Ltd.)		
Postal address:	PO Box 442, Kirkwood, 6120		
Telephone:	082 6528540 / 0422 320349	Cell:	072 5002938
E-mail:	danie@freshgro.co.za	Fax:	
Landowner 5:	Paardeberg North (285/1) & Salt Pan's Neck 287/RE		
Contact person:	Johann van Tonder		
Postal address:	PO Box 17, Jansenville, 6265		
Telephone:		Cell:	082 8244151
E-mail:		Fax:	
Landowner 6:	Paardeberg South 286/RE (and potentially 286/4 and the revised remainder which are unregistered subdivisions that can be registered at the Deeds Office at any time); 286/2; 286/3, Salt Pan's Neck 287/1 and <u>Servitude</u> : Vaalefontein 12/4 (and potentially 12/10 and a revised 12/4 which are unregistered subdivisions that can be registered at the Deeds Office at any time)		
Contact person:	John Skinner		
Postal address:			
Telephone:	Dawie Viljoen (Farm Manager) 082 5618191   John Skinner 041 5862620	Cell:	
E-mail:	john@johnskinner.co.za; rayniebekker@gmail.com	Fax:	
Landowner 13:	Salt Pan's Nek 287/2		
Contact person:	Vivian Skinner		
Postal address:	PO Box 9, Wolwefontein, 6237		
Telephone:		Cell:	072 6409143
E-mail:		Fax:	
Landowner 7:	Paardeberg South 286/1 and Annex Dassie Kloof Farm 291/RE		
Contact person:	Henry and Dudley Viljoen (Dassieskloof Boerderye CC)		
Postal address:	Hanna Laan 45, Rowallan Park, 6025		
Telephone:	Dudley 042 2327802; Henry 041 3912137	Cell:	Dudley 071 121 5231; Henry 072 606 1199
E-mail:	Duaneviljoen59@gmail.com; atmar@srvalley.co.za Henry.viljoen@gmail.com	Fax:	041 507 2937
Landowner 8:	Paardeberg South 286/5		
Contact person:	Louw Botes		
Postal address:			
Telephone:	042 232 0533	Cell:	082 742 4850
E-mail:	botes@srvalley.co.za	Fax:	
Transmission line (not affected by this amendment)			
Landowner 9:	<u>Servitude</u> : Blaauwbosch Kuil 669/1		
Contact person:	Poza Real Estate Pty (Ltd) (Mr. Ahmed Elgarib (Assistant to Sheik Alotaiba, Khalaf Ahmed Khalaf)		
Postal address:			
Telephone:		Cell:	+97 1563004848 (Assistant)
E-mail:	ahmed.elgharib@hilton.com;	Fax:	
Landowner 10:	<u>Servitude</u> : Blaauwbosch Kuil Ex 669/RE (and potentially 669/5, and revised remainder which are unregistered subdivisions that can be registered at the Deeds Office at any time); Ouplaas poort 668/0 and Vaalefontein (Otjies kraal) 12/1		
Contact person:	Ou Plaas Poort Trust (Schalk van der Merwe)		
Postal address:			
Telephone:		Cell:	082 5680015
E-mail:	pws@lantic.net	Fax:	
Landowner 11:	<u>Servitude</u> : Vaalefontein 12/3; 12/11, and Cauchafsie 60/1		
Contact person:	Daniel Jacobus Diedericks and Linda Diedericks		
Postal address:	PO Box 27, Wolwefontein, 6237	PO Box 10, Kleinpoort, 6236	
Telephone:		Cell:	076 0502130
E-mail:		Fax:	
Landowner 12:	<u>Servitude</u> : Crossing of the R75: Blaauwbosch Kuil 669/9 & 669/10 (sections of the R75)		
Contact person:	SANRAL (Ms René de Kock)		



Postal address:	1 Havenga Street, Oakdale, Bellville, Cape Town, 7530		
Telephone:	021 957 4600	Cell:	+21 946 1630
E-mail:	Dekockr@nra.co.za;	Fax:	
Landowner 13:	Servitude: Crossing of the railway: Uitenhage Railway line (9/0)		
Contact person:	Transnet Freight Rail Eastern Region (Zandile Dinwayo: Acting Manager & Brian Monakali (Chief Engineer)		
Postal address:			
Telephone:	012 315 2164	Cell:	060 577 2154
E-mail:	Zandile.Dinwayo@transnet.net; brain.monakali@transnet.net	Fax:	
Farm name, Erf No., portion etc.:	<p><b>Wind Farm – affected land portions</b></p> <ul style="list-style-type: none"> <li>• Hartebeestefontein (Farm No. 15) portions: <ul style="list-style-type: none"> <li>○ 15/RE (and potentially 15/4 and a revised 15/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>○ 15/2 (and potentially 15/3 which is an unregistered consolidation of 15/2 and 15/1 that can be registered at the Deeds Office at any time);</li> </ul> </li> <li>• Paardeberg North (Farm No. 285) portions: <ul style="list-style-type: none"> <li>○ 285/RE;</li> <li>○ 285/1;</li> <li>○ 285/2;</li> </ul> </li> <li>• Paardeberg South (Farm No. 286) portions: <ul style="list-style-type: none"> <li>○ 286/RE (and potentially 286/4 and a revised 286/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>○ 286/1;</li> <li>○ 286/2;</li> <li>○ 286/3;</li> <li>○ 286/5</li> </ul> </li> <li>• Salt Pan's Neck (Farm No. 287) portions: <ul style="list-style-type: none"> <li>○ 287/RE;</li> <li>○ 287/1;</li> <li>○ 287/2;</li> </ul> </li> <li>• Annex Dassie Kloof Farm (Farm No. 291) portions: <ul style="list-style-type: none"> <li>○ 291/RE</li> </ul> </li> <li>• Koffylaagte (Farm No. 304)</li> </ul> <p><b>Servitude (Transmission line)</b></p> <ul style="list-style-type: none"> <li>• Vaalefontein (Farm No. 12) portions: <ul style="list-style-type: none"> <li>○ 12/1;</li> <li>○ 12/3;</li> <li>○ 12/4 (and potentially 12/10 and a revised 12/4 which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>○ 12/11</li> </ul> </li> <li>• Cauchafskie (60) portions: <ul style="list-style-type: none"> <li>○ 60/1</li> </ul> </li> <li>• Ouplaas Poort (Farm No. 668) portions: 668/RE</li> <li>• Blaauwbosch Kuil (Farm No. 669) portions: <ul style="list-style-type: none"> <li>○ 669/RE; (and potentially 669/5, 669/9, 699/10 and a revised 669/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time)</li> <li>○ 669/1;</li> </ul> </li> <li>• Uitenhage rail (9/RE)</li> </ul>		

Figure 1: Explanatory cadastral map

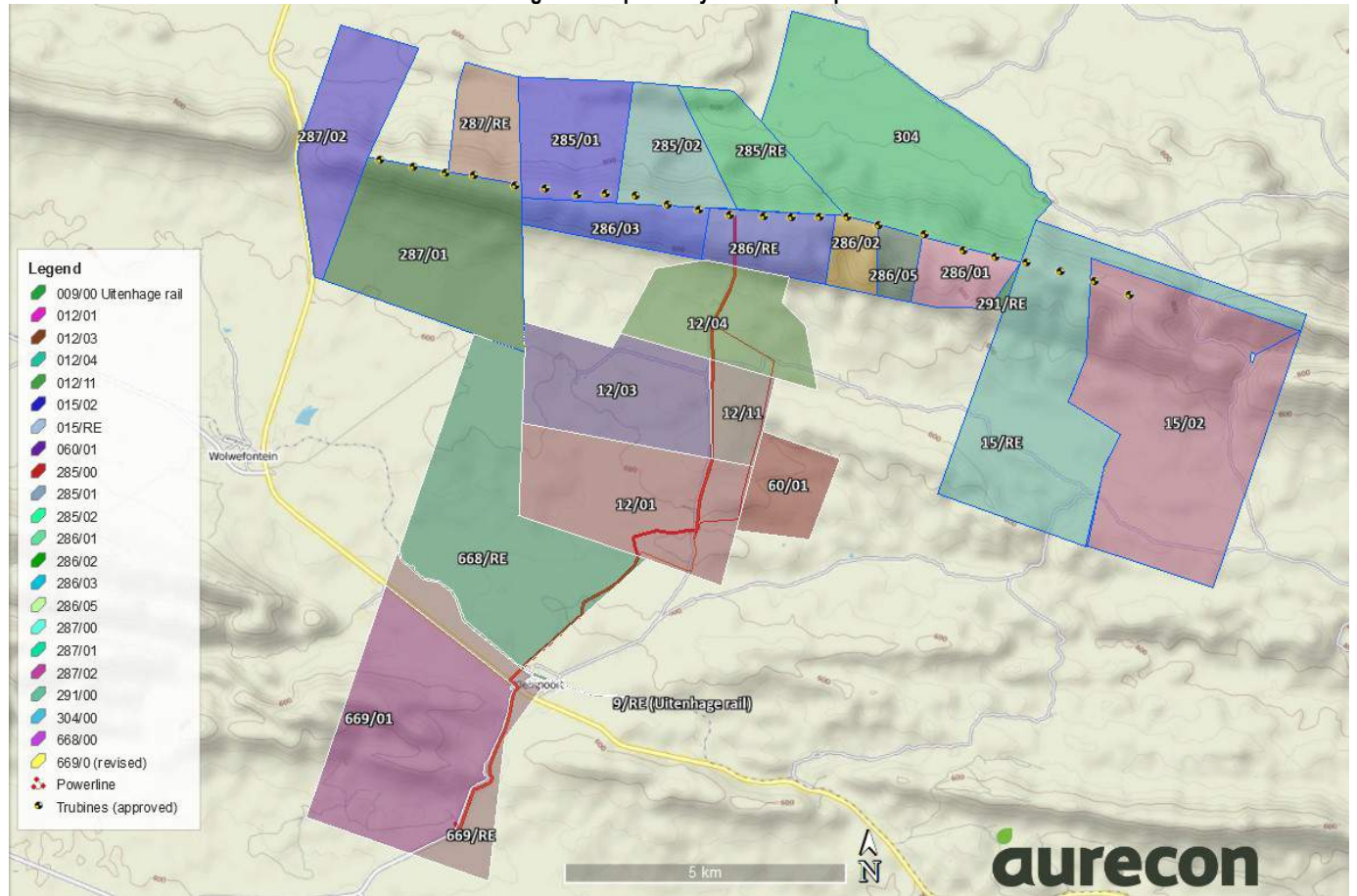
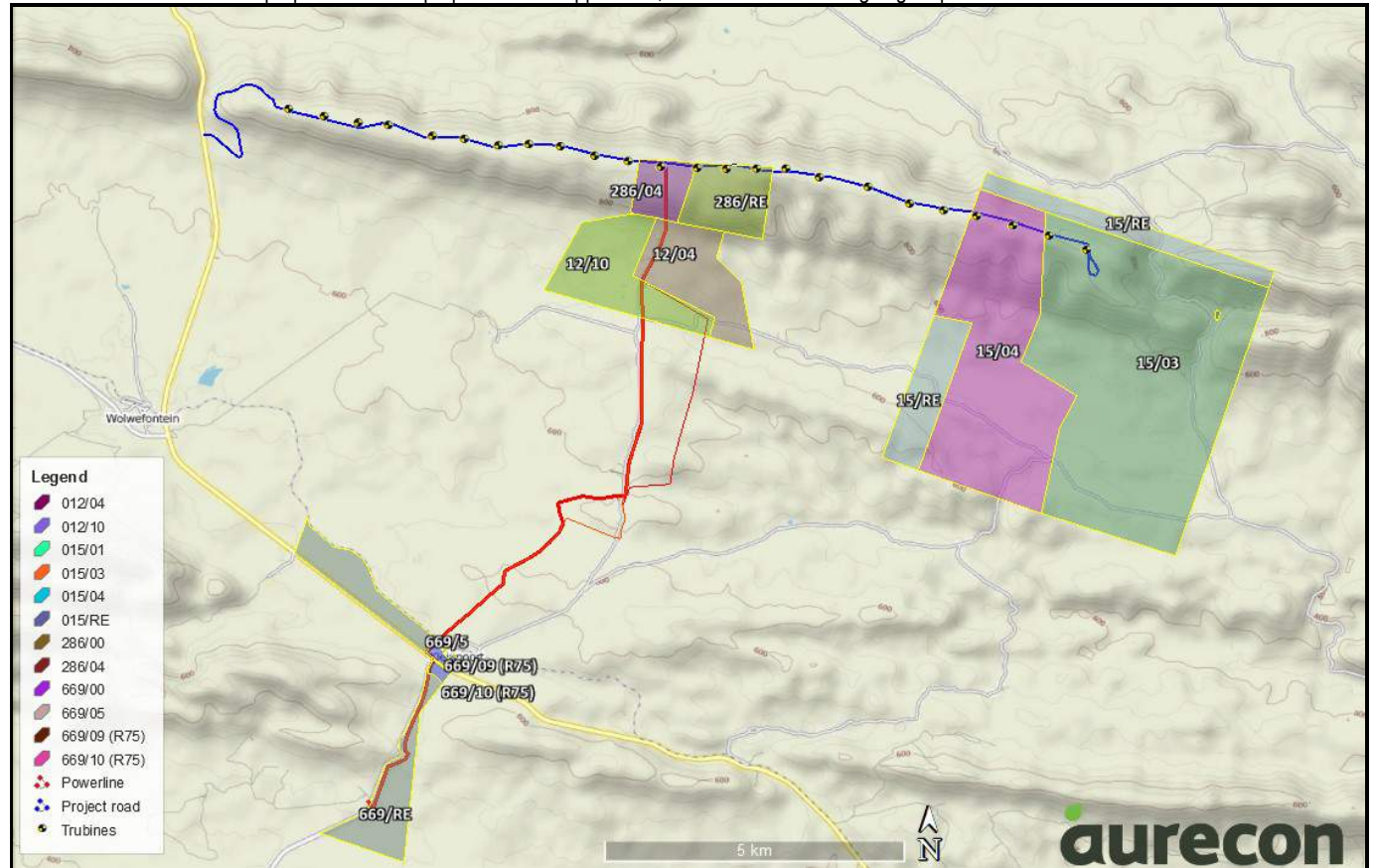


Figure 2: Unregistered subdivisions and consolidations that may be registered at any time - The Department should note that there are some challenges and many possible changes to cadastral information that may occur at any time and could be cause for confusion. We provide those that we are aware of here for information purposes. For the purposes of the application, those listed in the foregoing map and sections should be used.



APPENDIX 5  
DECLARATION OF THE EAP

I, **Patrick Killick**, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 14 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

**Disclosure of Vested Interest (delete whichever is not applicable)**

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

I have no vested interests



Signature of the Environmental Assessment Practitioner

Aurecon South Africa (Pty) Ltd

Name of Company:

11 November 2019

Date

**UNDERTAKING UNDER OATH/ AFFIRMATION**

I, **Patrick Killick**, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

  
Signature of the Environmental Assessment Practitioner

Aurecon South Africa (Pty) Ltd

Name of Company:

Date

11 November 2019

  
Signature of the Commissioner of Oaths

Date

.....  
**JOUBERT THEART**  
COMMISSIONER OF OATHS  
PROJECT MANAGER  
AURECON SOUTH AFRICA (PTY) LTD  
SUITE 201, SECOND FLOOR, BLOEMHOF BUILDING  
65 YORK STREET, GEORGE 6530  
REF.: 9/1/8/2 GEORGE

# ANNEXURE A.2

DEA's response to the application

**DEA Acknowledgement of Application form**

No acknowledgment received. Application form submitted under cover letter dated 20 January 2020 at time of going to press.

# ANNEXURE A.3

Copy of revised application form



# environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## APPLICATION FORM FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION

File Reference Number: NEAS Reference Number: Date Received: Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)	(For official use only)	
	DEA/EIA/	

### PROJECT TITLE

<b>EA AMENDEMENT: WOLF WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE (DEA Ref. 14-12-16-3-3-1-599)</b>		
Indicate if the <b>DRAFT</b> report accompanies the application	Yes	No <input checked="" type="checkbox"/>

### PRE-APPLICATION CONSULTATION

Was a pre-application meeting held	Yes	No <input checked="" type="checkbox"/>
Date of the pre-application meeting		
Reference number of pre-application meeting held		
Were minutes compiled and submitted to the Department for approval	Yes	No

A copy of the pre-application meeting minutes must be appended to this application as **APPENDIX 1**.

### Kindly note the following:

- This form must be used to apply for the Amendment of an Environmental Authorisation where this Department is the Competent Authority. An amendment includes:
  - adding, substituting, removing or changing a condition or requirement of an Environmental Authorisation, or
  - updating or changing any details or correcting a technical error.
- This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
- An application fee is applicable (refer to **Section 2**). Proof of payment must accompany this application. The application will not be processed without proof of payment unless one of the exclusions provided for in the Fee Regulations is applicable AND such information in the exclusion section of this application form has been confirmed by this Department.
- A cover letter on your company letterhead indicating the nature of this application must be appended to this form i.e. new application for Environmental Authorisation, updated application for Environmental Authorisation.
- An electronic copy (in the form of a USB) of the signed application form must be submitted together with two hardcopies (one of which must contain the original signatures of both the Applicant and EAP).
- This form must be marked "**for Attention: Chief Director: Integrated Environmental Authorisations**" and submitted to the Department at the postal or physical addresses contained in this form.
- All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
- All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.
- The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial 10).
- Where applicable black out the boxes that are not applicable in the form.
- The use of the phrase "not applicable" in the form must be done with circumspection. Where it is used in respect of material information that is required by the Competent Authority for assessing the application, this may result in the rejection of the application as provided for in the Regulations.
- Unless protected by law, all information contained in and attached to this application, will become public information on receipt by the Competent Authority. Upon request during any stage of the application process, the Applicant / EAP must provide any registered interested and affected party with the information contained in and attached to this application.
- Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report and declaration of interest of the specialist must also be submitted.
- Please note that this form must be copied to the relevant Provincial Environmental Department(s).
- Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form.
- An application for Environmental Authorisation/Amendment lapses if the applicant fails to meet any of the timeframes prescribed in terms of the EIA Regulations, 2014, as amended.

### 17. Departmental Details

<p><b>Postal address:</b>          Department of Environmental Affairs          Attention: Chief Director: Integrated Environmental Authorisations          Private Bag X447          Pretoria          0001</p> <p><b>Physical address:</b>          Department of Environmental Affairs          Attention: Chief Director: Integrated Environmental Authorisations          Environment House          473 Steve Biko Road          Arcadia</p> <p>Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:          Email: <a href="mailto:EIAAdmin@environment.gov.za">EIAAdmin@environment.gov.za</a></p>
--

**1. COMPETENT AUTHORITY**

Identified Competent Authority to consider the application:  
Reason(s) in terms of S24C of NEMA:

DEA
EA relates to Renewable Energy and was authorised by the DEA (DEA Ref. 14/12/16/3/3/1/599, as amended)

**2. FEES**

Applicants are required to tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof of payment or a motivation for exclusions must be attached as **APPENDIX 3** of this application form.

Proof of payment	✓
Exclusion applies	X

An applicant is excluded from paying fees if (a) The activity is a community-based project funded by a government grant; or (b) The applicant is an organ of state.

TYPE OF EXCLUSION	Yes / no
The activity is a community-based project funded by a government grant	X
The applicant is an organ of state	X

FEE AMOUNT	Fee
Application for an Amendment of an Environmental Authorisation	R2 000

Department of Environmental Affairs' banking details for the payment of application fees:

**Payment Enquiries:**  
Email: eiafee@environment.gov.za

**Banking details:**  
ABSA Bank  
Branch code: 632005  
Account number: 1044 2400 72  
Current account  
Ref: **-33.255981 24.920660**

**Reference number: Reference number to be provided in the specific format indicating centre point coordinates of site in decimal degrees to 5 or 6 decimal places: latitude/longitude: Centre coordinates for this application are: (-33.255981 24.920660)**

**Status:** Tax exempted

**3. GENERAL INFORMATION**

Name of the Applicant:	Wolf Wind Farm (Pty) Ltd		
Name of contact person for applicant:	Chris Bellingham		
RSA Identity/ Passport Number:	7809035572087		
Responsible position, e.g. Director.:	Head of Project Development - Wind & Solar		
Company/ Trading name (if any):	Wolf Wind Farm (Pty) Ltd		
Company Registration Number:	2012/027727/07		
BBBEE status:	Level 4		
Physical address:	20th Floor, The Halyard, 4 Christiaan Barnard Street Foreshore Cape Town*		
Postal address:	20th Floor, The Halyard, 4 Christiaan Barnard Street Foreshore Cape Town*		
Postal code:	8001	Cell:	+24 (0) 83 443 5154
Telephone:	Work: +27 (0) 21 831 6100	Fax:	+27(0) 21 831 6199
E-mail:	bellingham@juwi.co.za		

Name of the landowner:	<b>See Appendix 4</b>
Name of contact person for landowner:	
Postal address:	
Postal code:	
Telephone:	
E-mail:	

**\*Note, this is a new physical and postal address for the applicant**

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as **APPENDIX 4**.

Certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto, if applicable must be attached to this application as **APPENDIX 2**. Should a certified copy/ies of the Environmental Authorisation and subsequent Amendments thereto not be available an original commissioned Affidavit/Affirmation under oath undertaken by the must be appended to this application form

Provincial Environmental Authority:	Eastern Cape Department of Economic Development, Environmental Affairs and Tourism		
Name of contact person:	Dayalan Govender		
Postal address:	Private Bag X5001, Greenacres		
Postal code:	6057	Cell:	
Telephone:	041 508 5811	Fax:	
E-mail:	dayalan.govender@dedia.gov.za		



Primary Local Municipality:	Dr Beyers Naudé Local Municipality (Formerly Ikwezi Local Municipality <sup>1</sup> )		
Name of env. contact person	The Municipal Manager (Dr EM Rankwana)		
Postal address:	P.O Box 71, Graaf Reinet		
Postal code:	6280	Cell:	
Telephone:	049 807 5778	Fax:	049 892 2166
E-mail:	mmoffice@bnlm.gov.za		

Second Local Municipality:	Sundays River Valley Local Municipality		
Name of env. contact person	The Municipal Manager (Mr Sidney Fadi)		
Postal address:	PO Box 47, Kirkwood,		
Postal code:	6120	Cell:	
Telephone:	042 230 7731	Fax:	042 230 0069
E-mail:	MM@Srvm.Gov.Za		

In instances where there is more than one Local/Provincial Authority involved, please attach a list of those Local/ Provincial Authorities with their contact details.

#### 4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

Company of EAP:	Aurecon South Africa (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 1	% procurement recognition
EAP name:	Patrick Killick		
EAP Qualifications:	MPhil Environmental Management		
Professional affiliation/registration:	IAIA South Africa		
Physical address:	Suite 201, 2nd Floor, Bloemhof Building, 65 York St, George, South Africa		
Postal address:	PO Box 509, George		
Postal code:	6530	Cell:	
Telephone:	044 8055432	Fax:	044 8055454
E-mail:	Patrick.Killick@aurecongroup.com		

The appointed EAP must meet the requirements of Regulation 13 of GN R982 of 04 December 2014, as amended.

If appointed, the declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted or to be submitted for the purposes of the application is true and correct must be submitted as **APPENDIX 5**.

#### 5. DETAILS OF IMPLEMENTATION OF PREVIOUS ENVIRONMENTAL AUTHORISATION

Was the activity commenced with during the validity period of the environmental authorisation? If yes, please describe the implementation of the previous environmental authorisation to date:	YES	NO ✓
Not applicable		

#### 6. AMENDMENTS APPLIED FOR AND RELATED INFORMATION

Please indicate which of the following is relevant:

6.1. The holder of an environmental authorisation may at any time apply to the relevant Competent Authority for the amendment of the authorisation if:

(a) there is a material change in the circumstances which existed at the time of the granting of the environmental authorisation;	YES	NO ✓
(b) there has been a change of ownership in the property and transfer of rights and obligations must be provided for; or	YES	NO ✓
(c) any detail contained in the environmental authorisation must be amended, added, substituted, corrected, removed or updated.	YES ✓	NO

Describe the amendments that are being applied for:
<p>Wolf Wind Farm (Pty Ltd would like to amend the EA to make provision for the following:</p> <ol style="list-style-type: none"> <li><b>Tower height:</b> Increase turbine tower height from ≤110m to ≤135m</li> <li><b>Rotor diameter:</b> Increase max Rotor diameter from ≤160m to ≤186m</li> <li><b>Turbine numbers:</b> Decrease turbine positions from ≤24 to ≤21 (dropping turbines No. 1, 2 and 16)</li> <li><b>Layout revision:</b> Micrositing of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).</li> <li><b>Update of Applicant address</b> – The applicant has moved offices and these details will be amended.</li> <li><b>Update EA Condition 13.17:</b> Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the current amendment</li> </ol>

<sup>1</sup> Baviaans Local Municipality and Ikwezi Local Municipality were merged into Camdeboo Local Municipality and renamed Dr Beyers Naudé Local Municipality on 3 August 2016. Source : <https://municipalities.co.za/contacts/1013/dr-beyers-naude-local-municipality>

Please provide the reasons and/or a motivation for the application for amendment:

The motivation for the amendment is due mainly to market constraints and opportunities, namely:

1. Market supply constraints for certain turbines including older technology (older turbines may not be available);
2. Improved technology certified and available only after original Environmental Approval and the subsequent amendments;
3. Unforeseen delays in Government's renewable energy procurement processes which calls for technology update;
4. Better fit for purpose technology is available today to suit the wind resource of the site and the applicant would like to increase the wind turbine envelope to allow them to consider a broader range of manufacturers and wind turbine models which can enhance the environmental, technical and financial feasibility of the project and avoid potential implementation delays;
5. The project must be updated according to the latest technology if it is to remain feasible and competitive against other projects being bid as part of the REIPPPP

Should the amendment being requested result due to **6.1 (b)** above, you are required to furnish the Department with a written undertaking that the new holder of the environmental authorisation is willing and able to assume responsibility of the environmental authorisation issued. Provide a short motivation and explanation below:

Not applicable

**7. ENVIRONMENTAL IMPACTS**

Describe any negative environmental impacts that may occur if the application for amendment is granted, amongst others information on any increases in air emissions, waste generation, discharges to water and impacts of the natural or cultural environment must be included.

A possibility exists that an increase in turbine size may affect the impact significance ratings for the following aspects and the relevant specialists have been approached. Specialists that have agreed a review is necessary:

- **Visual** – The change in the turbine size and number may alter the visual impact significance.
- **Bats** – A larger rotor diameter will result in larger swept area (per turbine) and changed swept area, which may alter the impact significance ratings on bats.
- **Birds** - A larger rotor diameter will result in larger swept area (per turbine) and altered swept area envelope may alter the impact significance ratings on birds.
- **Botanical** – Micrositing of turbines and refinements to roads, substations have the potential to change impact on botanical aspects due to footprint related changes.
- **Noise** –Larger turbines may alter the noise profile. (Specialist has confirmed the changes are not significant and a review is not required)
- **Socioeconomic** – Fewer turbines may result reduce local investment and employment (Specialist confirmed the changes are not significant and a review is not required)
- **Heritage** –Possible changes to the visual impacts may have had implications on “sense of place” (Specialist has reviewed visual specialists reports and confirms that a review would not be necessary)

Describe any negative environmental impacts that may occur if the application for amendment is not granted.

Should the amendments not be granted the applicant will not be able to utilise the latest, most efficient turbines available on the market, which would render the project less competitive in REIPPPP compared to other projects that are able to utilise the latest turbine models. Should the project be uncompetitive it may not be selected as a preferred bidder in REIPPPP and the project would not be developed – and as a result the positive socio-economic benefits associated with the development (as described in detail in the final EIR Report) would be foregone.

Describe any positive environmental impacts that may occur if the application for amendment is granted, amongst others information on any reduction in the ecological footprint, air emissions, waste generation and discharges to water must be included.

The proposed larger turbine specifications will enable the applicant to utilise the latest, most efficient turbines available on the market, which will improve the energy output from the project and therefore increase both its competitiveness in the REIPPPP and the likelihood of the Project achieving the socio-economic benefits associated with the development (as described in detail in the final EIR Report).

**8. AUTHORISATION FROM OTHER GOVERNMENT DEPARTMENTS**

Are any permission, licenses or other authorisations required from any other departments before the requested amendments can be affected?	YES	NO <input checked="" type="checkbox"/>
---	-----	--

If yes, please complete the table below.

Name of department and contact person	Authorisation required	Authorisation applied for(Yes/ No)
NA	NA	NA

**9. RIGHTS OR INTERESTS OF OTHER PARTIES**

In your opinion, will this proposed amendment adversely affect the rights and interests of other parties? Please provide a motivation:	YES	NO <input checked="" type="checkbox"/>
--	-----	--

The amendment would replace a 90MW wind energy facility with a 90MW wind energy facility. The size and number of turbines is unlikely to significantly affect the rights or interests of other parties as compared with the currently approved project. The scope, nature and level of impact are likely to remain same.

NOTE: The Department is entitled to request further information if it believes it is necessary for the consideration of the application. If the application is for a substantive amendment or if the rights or interests of other parties are likely to be adversely affected, the Department will instruct the applicant to conduct a public participation process and to conduct any investigations and assessments that it deems necessary.

10. LIST OF APPENDICES

		SUBMITTED	
		YES	NO
APPENDIX 1	Copy of the pre-application meeting minutes	YES	NO ✓
APPENDIX 2	Certified copy/ies of the Environmental Authorisation and all subsequent Amendments thereto or original commissioned Affidavit/Affirmation under oath	YES ✓	NO
APPENDIX 3	Proof of Payment / Motivation for exclusion	YES ✓	NO
APPENDIX 4	List of land owners (with contact details)	YES ✓	NO
APPENDIX 5	Declaration of independence of the EAP and undertaking under oath or affirmation, if appointed	YES ✓	NO

11. DECLARATION

I, CHRIS BELLINGHAM, declare that I will comply with all my legal obligations in terms of this application and provide accurate information to everyone concerned in respect to this application.



Signature of the Applicant:

JUNI RENEWABLE ENERGIES (PTY) LTD

Name of Company or Organisation:

4 NOVEMBER 2019

Date:

APPENDIX 1  
COPY OF THE PRE-APPLICATION MEETING MINUTES

[No Pre-application held]

APPENDIX 2  
CERTIFIED COPY/IES OF THE ENVIRONMENTAL AUTHORISATION AND ALL SUBSEQUENT AMENDMENTS THERETO OR ORIGINAL  
COMMISSIONED AFFIDAVIT/AFFIRMATION UNDER OATH

**Not re-copied here (see previous application form)**

APPENDIX 3  
PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION



Advice sending date: 01 Nov 2019  
Advice reference no: GLVB01087856  
Page: 1/1

Payment Advice

Recipient's name and contact information:

Mrs Christelle Fourie  
christelle.fourie@juwi.co.za

Transaction type: ACH credits

Beneficiary name:	DEPT OF ENVIRONMENTAL AFFA	Amount:	ZAR2,000.00
Beneficiary's bank:	ABSA BANK LTD	Value date:	01 Nov 2019
	South Africa	Remitter's name:	Juwi RE Pty Ltd
Beneficiary account number:	10442***** (Part of the account number is shown as ***** for security reasons.)	Remitting bank:	HSBC Bank PLC Johannesburg Branch
Customer reference:	Dept of environmental af	Instruction reference:	78845LL024U5
2nd party reference:	33 255981 24 920660		

Remitter to beneficiary information:  
<No details are provided>

Important notes:

This Advice is issued at the request of our customer. It purports to set out certain details of the transaction that our Bank was instructed to effect. This is NOT a confirmation that the transaction has been or will be effected. You should conduct your own verification and confirmation regarding the information set out in this Advice including, without limitation, the status of the transaction mentioned in it. This Advice is for your reference only and is not to be relied upon by you or any one for any purpose. We have not verified the content of this Advice and bear no responsibility therefor. Where this Advice is sent by facsimile or over the internet, you should take note that communication by facsimile or over the internet may be interrupted, delayed or fail. In particular, e-mail messages sent via the internet cannot be guaranteed to be secure, error or virus-free as information could be intercepted, corrupted, lost, arrive late or contain viruses. The Bank shall bear no liability whatsoever for any direct, indirect or consequential loss arising out of this Advice being sent by facsimile or over the internet whether caused by the Bank or other third parties. The information contained in this Advice is confidential. It may also be legally privileged. If you are not the addressee you may not copy, forward, disclose or use any part of it.

**APPENDIX 4  
LIST OF LAND OWNERS**

Properties affected by the WEF (As approved)			
Landowner 1:	Hartebeestefontein 15/RE (and potentially 15/4 and a revised remainder which are unregistered subdivisions that can be registered at the Deeds Office at any time)		
Contact person:	Christie Beets		
Postal address:	PO Box 6097, Moselville, 6232		
Telephone:		Cell:	049 8380047 only after 8pm
E-mail:		Fax:	
Landowner 2:	Hartebeestefontein 15/2 (and potentially 15/3 which is an unregistered consolidation of 15/2 and 15/1 that can be registered at the Deeds Office at any time)		
Contact person:	Stephnus Scheepers		
Postal address:	P.O box 53, Patensie, 6335		
Telephone:		Cell:	082 8752398
E-mail:	stephnus@scheyisa.net	Fax:	
Landowner 3:	Koffylaagte 304 & Paardeberg North 285/RE		
Contact person:	Cem Kumral (Koffylaagte Game Lodge CC)		
Postal address:	14 Strandview Mansions, Marine Drive, Port Elizabeth, 6001		
Telephone:	049 836 9188	Cell:	083 357 0162
E-mail:	cemkumral@mweb.co.za	Fax:	
Landowner 4:	Paardeberg North (Jackals Vlei) 285/2		
Contact person:	Danie Stander (previously Blue Age Prop 21 Pty. Ltd.)		
Postal address:	PO Box 442, Kirkwood, 6120		
Telephone:	082 6528540 / 0422 320349	Cell:	072 5002938
E-mail:	danie@freshgro.co.za	Fax:	
Landowner 5:	Paardeberg North (285/1) & Salt Pan's Neck 287/RE		
Contact person:	Johann van Tonder		
Postal address:	PO Box 17, Jansenville, 6265		
Telephone:		Cell:	082 8244151
E-mail:		Fax:	
Landowner 6:	Paardeberg South 286/RE (and potentially 286/4 and the revised remainder which are unregistered subdivisions that can be registered at the Deeds Office at any time); 286/2; 286/3, Salt Pan's Neck 287/1 and <u>Servitude: Vaalefontein 12/4</u> (and potentially 12/10 and a revised 12/4 which are unregistered subdivisions that can be registered at the Deeds Office at any time)		
Contact person:	John Skinner		
Postal address:			
Telephone:	Dawie Viljoen (Farm Manager) 082 5618191   John Skinner 041 5862620	Cell:	
E-mail:	john@johnskinner.co.za; rayniebekker@gmail.com	Fax:	
Landowner 13:	Salt Pan's Nek 287/2		
Contact person:	Vivian Skinner		
Postal address:	PO Box 9, Wolwefontein, 6237		
Telephone:		Cell:	072 6409143
E-mail:		Fax:	
Landowner 7:	Paardeberg South 286/1 and Annex Dassie Kloof Farm 291/RE		
Contact person:	Henry and Dudley Viljoen (Dassieskloof Boerderye CC)		
Postal address:	Hanna Laan 45, Rowallan Park, 6025		
Telephone:	Dudley 042 2327802; Henry 041 3912137	Cell:	Dudley 071 121 5231; Henry 072 606 1199
E-mail:	Duaneviljoen59@gmail.com; atmar@srvalley.co.za Henry.viljoen@gmail.com	Fax:	041 507 2937
Landowner 8:	Paardeberg South 286/5		
Contact person:	Louw Botes		
Postal address:			
Telephone:	042 232 0533	Cell:	082 742 4850
E-mail:	botes@srvalley.co.za	Fax:	
Transmission line (not affected by this amendment)			
Landowner 9:	<u>Servitude: Blaauwbosch Kuil 669/1</u>		
Contact person:	Poza Real Estate Pty (Ltd) (Mr. Ahmed Elgarib (Assistant to Sheik Alotaiba, Khalaf Ahmed Khalaf)		
Postal address:			
Telephone:		Cell:	+97 1563004848 (Assistant)
E-mail:	ahmed.elgharib@hilton.com;	Fax:	
Landowner 10:	<u>Servitude: Blaauwbosch Kuil Ex 669/RE</u> (and potentially 669/5, and revised remainder which are unregistered subdivisions that can be registered at the Deeds Office at any time); Ouplaas poort 668/0 and Vaalefontein (Otjies kraal) 12/1		
Contact person:	Ou Plaas Poort Trust (Schalk van der Merwe)		
Postal address:			
Telephone:		Cell:	082 5680015
E-mail:	pws@lantic.net	Fax:	
Landowner 11:	<u>Servitude: Vaalefontein 12/3; 12/11, and Cauchafsie 60/1</u>		
Contact person:	Daniel Jacobus Diedericks and Linda Diedericks		
Postal address:	PO Box 27, Wolwefontein, 6237	PO Box 10, Kleinpoort, 6236	
Telephone:		Cell:	076 0502130
E-mail:		Fax:	
Landowner 12:	<u>Servitude: Crossing of the R75: Blaauwbosch Kuil 669/9 &amp; 669/10</u> (sections of the R75)		
Contact person:	SANRAL (Ms René de Kock)		

Postal address:	1 Havenga Street, Oakdale, Bellville, Cape Town, 7530		
Telephone:	021 957 4600	Cell:	+21 946 1630
E-mail:	Dekockr@nra.co.za;	Fax:	
Landowner 13:	Servitude: Crossing of the railway: Uitenhage Railway line (9/0)		
Contact person:	Transnet Freight Rail Eastern Region (Zandile Dinwayo: Acting Manager & Brian Monakali (Chief Engineer)		
Postal address:			
Telephone:	012 315 2164	Cell:	060 577 2154
E-mail:	Zandile.Dinwayo@transnet.net; Brian.Monakali@transnet.net	Fax:	
Farm name, Erf No., portion etc.:	<p><b>Wind Farm – affected land portions</b></p> <ul style="list-style-type: none"> <li>• Hartebeestefontein (Farm No. 15) portions: <ul style="list-style-type: none"> <li>○ 15/RE (and potentially 15/4 and a revised 15/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>○ 15/2 (and potentially 15/3 which is an unregistered consolidation of 15/2 and 15/1 that can be registered at the Deeds Office at any time);</li> </ul> </li> <li>• Paardeberg North (Farm No. 285) portions: <ul style="list-style-type: none"> <li>○ 285/RE;</li> <li>○ 285/1;</li> <li>○ 285/2;</li> </ul> </li> <li>• Paardeberg South (Farm No. 286) portions: <ul style="list-style-type: none"> <li>○ 286/RE (and potentially 286/4 and a revised 286/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>○ 286/1;</li> <li>○ 286/2;</li> <li>○ 286/3;</li> <li>○ 286/5</li> </ul> </li> <li>• Salt Pan's Neck (Farm No. 287) portions: <ul style="list-style-type: none"> <li>○ 287/RE;</li> <li>○ 287/1;</li> <li>○ 287/2;</li> </ul> </li> <li>• Annex Dassie Kloof Farm (Farm No. 291) portions: <ul style="list-style-type: none"> <li>○ 291/RE</li> </ul> </li> <li>• Koffylaagte (Farm No. 304)</li> </ul> <p><b>Servitude (Transmission line)</b></p> <ul style="list-style-type: none"> <li>• Vaalefontein (Farm No. 12) portions: <ul style="list-style-type: none"> <li>○ 12/1;</li> <li>○ 12/3;</li> <li>○ 12/4 (and potentially 12/10 and a revised 12/4 which are unregistered subdivisions that can be registered at the Deeds Office at any time);</li> <li>○ 12/11</li> </ul> </li> <li>• Cauchafskie (60) portions: <ul style="list-style-type: none"> <li>○ 60/1</li> </ul> </li> <li>• Ouplaas Poort (Farm No. 668) portions: 668/RE</li> <li>• Blaauwbosch Kuil (Farm No. 669) portions: <ul style="list-style-type: none"> <li>○ 669/RE; (and potentially 669/5, 669/9, 699/10 and a revised 669/RE which are unregistered subdivisions that can be registered at the Deeds Office at any time)</li> <li>○ 669/1;</li> </ul> </li> <li>• Uitenhage rail (9/RE)</li> </ul>		



Figure 1: Explanatory cadastral map

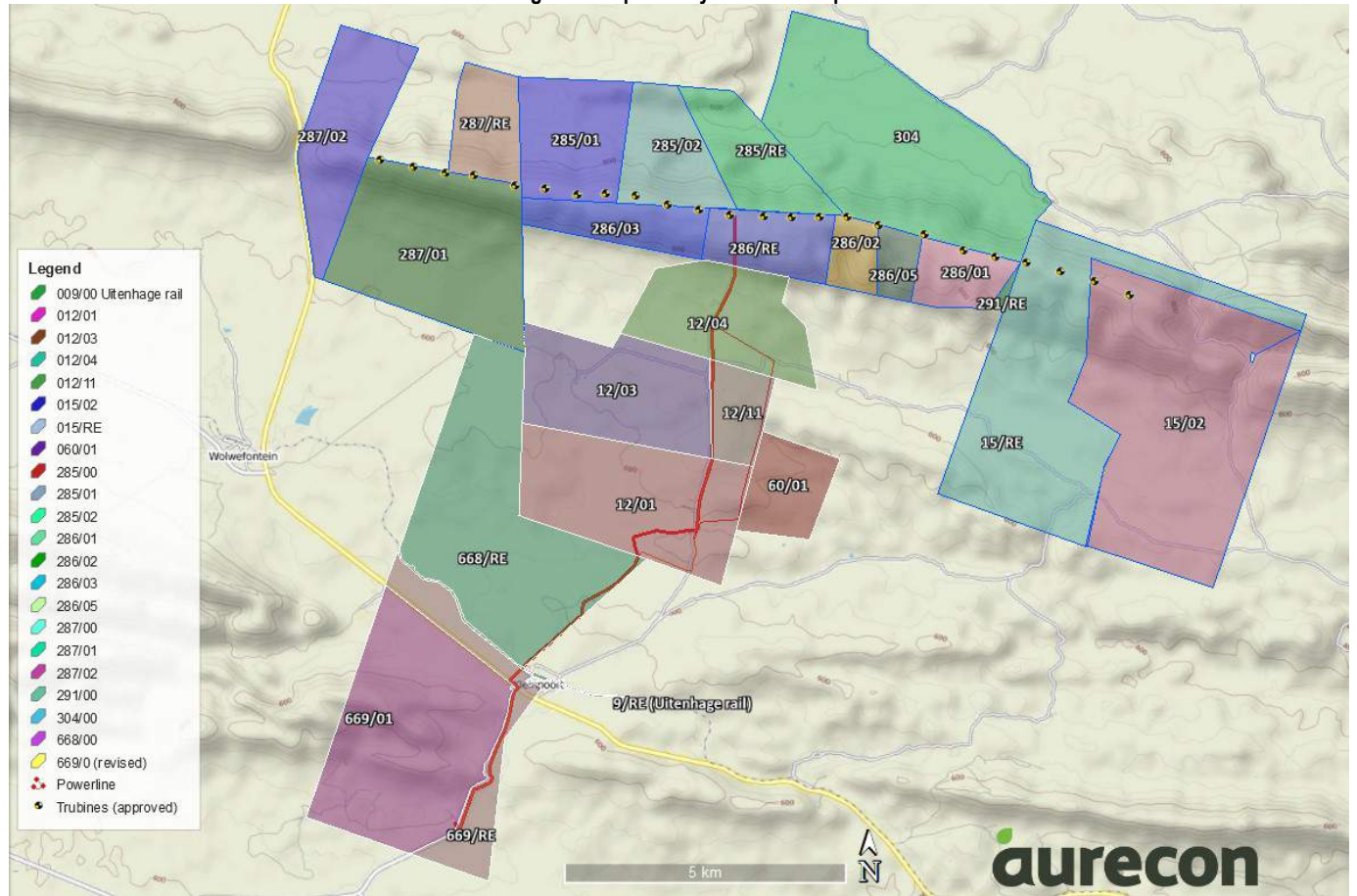
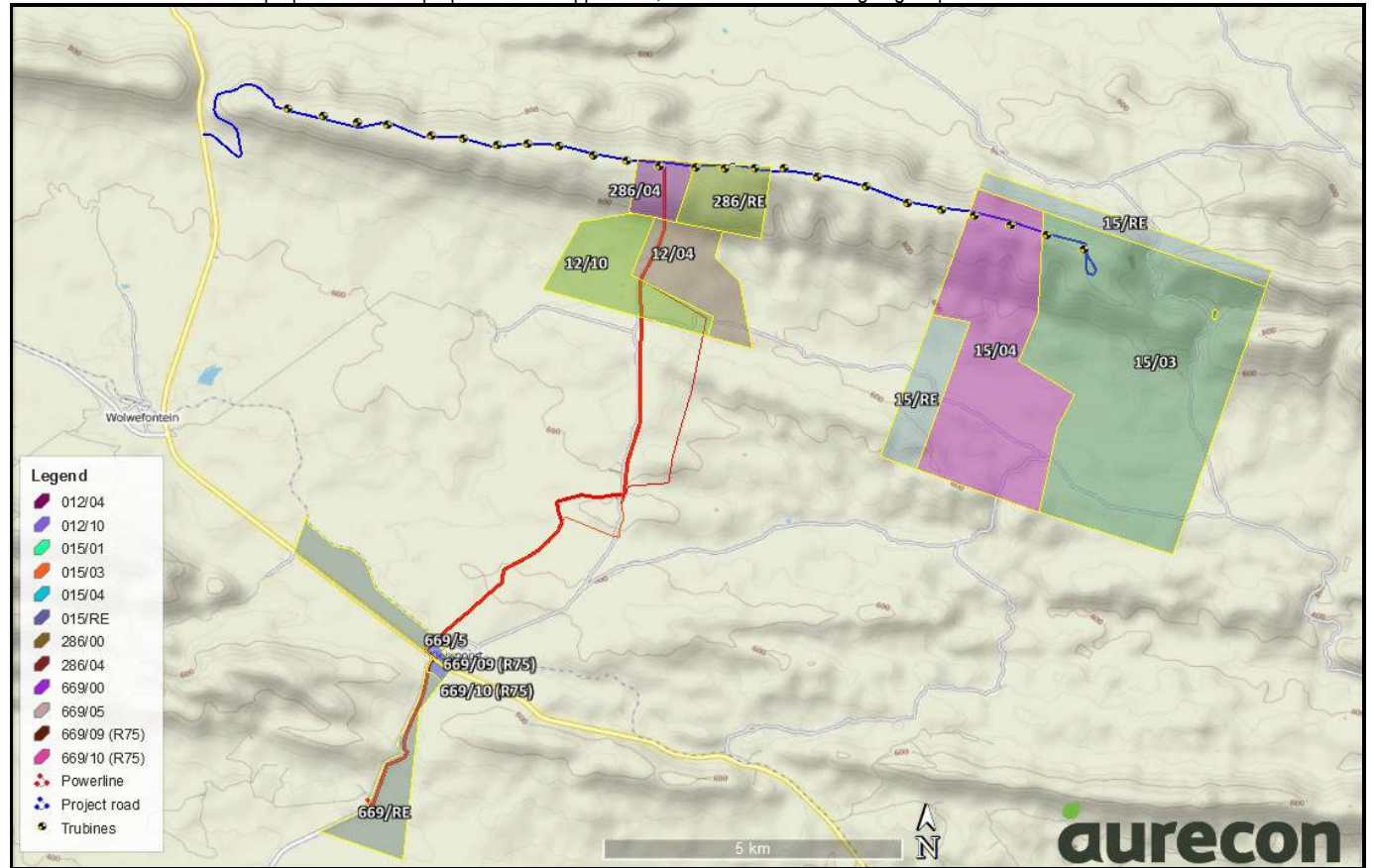


Figure 2: Unregistered subdivisions and consolidations that may be registered at any time - The Department should note that there are some challenges and many possible changes to cadastral information that may occur at any time and could be cause for confusion. We provide those that we are aware of here for information purposes. For the purposes of the application, those listed in the foregoing map and sections should be used.



APPENDIX 5  
DECLARATION OF THE EAP

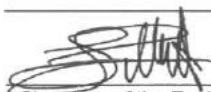
I, **Patrick Killick**, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 14 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

**Disclosure of Vested Interest (delete whichever is not applicable)**

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

I have no vested interests



Signature of the Environmental Assessment Practitioner

Aurecon South Africa (Pty) Ltd

Name of Company:

25/02/2020

Date

**UNDERTAKING UNDER OATH/ AFFIRMATION**

I, **Patrick Killick**, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

  
Signature of the Environmental Assessment Practitioner

Aurecon South Africa (Pty) Ltd

Name of Company:

25/02/2020

Date

  
Signature of the Commissioner of Oaths

2020/02/25

Date

.....  
**JOUBERT THEART**  
COMMISSIONER OF OATHS  
PROJECT MANAGER  
AURECON SOUTH AFRICA (PTY) LTD  
SUITE 201, SECOND FLOOR, BLOEMHOF BUILDING  
65 YORK STREET, GEORGE 6530  
REF.: 9/1/8/2 GEORGE

# ANNEXURE A.4

DEA's comment on the Draft EA Report (refer  
to final)

Will be provided as part of final EA Report

# **ANNEXURE B**

## **SPECIALISTS STATEMENTS (NO REVIEW)**

# ANNEXURE B.1

Botanical



Aurecon South Africa (Pty) Ltd  
PO Box 509,  
George  
6530  
South Africa  
Attention: Mr Patrick Killick

4 December 2019

**RE: PROPOSED AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION: WOLF WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE (14-12-16-3-3-2-599)**

Dear Patrick,

The application to amend the Environmental Authorisation (EA) dated 17 September 2015 for the Wolf Wind Farm, near Wolwefontein in the Eastern Cape (DEA Ref.:14/12/16/3/3/2/599) has reference. In my capacity as Botanical Specialist, and having undertaken the original impact assessment for the project in May 2014, I hereby note that Wolf Wind Farm (Pty Ltd would like to amend the EA to make provision for the following:

- Increased tower height from  $\leq 110\text{m}$  to  $\leq 135\text{m}$ ;
- Increased max rotor diameter from  $\leq 160\text{m}$  to  $\leq 186\text{m}$ ;
- Total turbine positions decrease from  $\leq 24$  to  $\leq 21$ ; and
- Micro-siting of 8 turbine positions to avoid bat sensitive areas

The micrositing of turbines and layout refinement would result some adjustments to the layout of roads and associated facilities. A simplified version of the approved layout vs the proposed layout is shown on the overleaf. The approved layout is shown as blues and the proposed amendment in reds, for comparison.

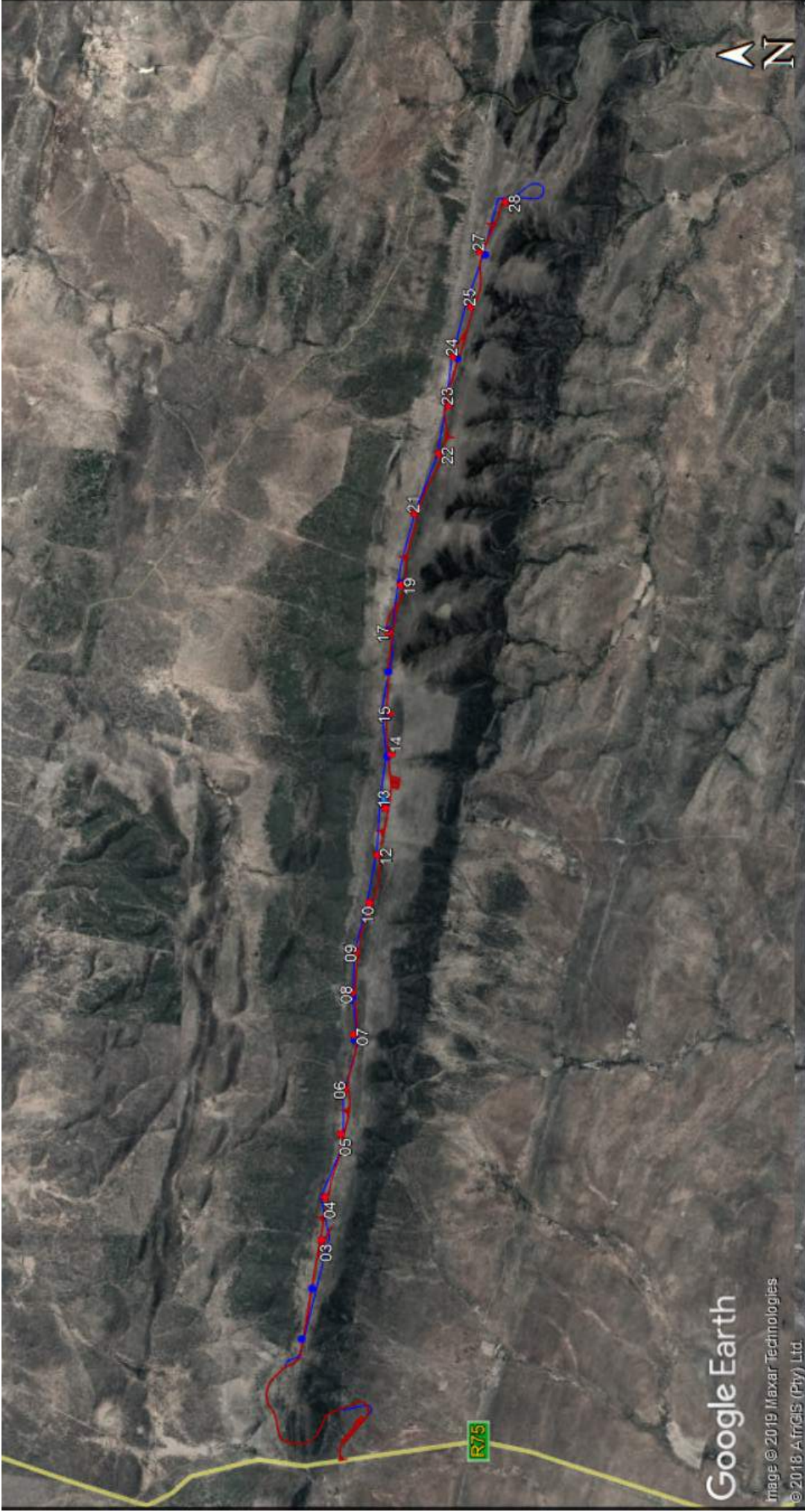
Having considered the original assessment in light of the proposed amendment and refined layout, I confirm that the proposed changes would not:

- result in any new impacts on the vegetation and flora,
- change the nature or scope of the impacts already assessed, or
- materially change the impact significance rating or associated mitigation recommendations originally presented.

Therefore, the proposed amendment would have no significant effect on the impact profile from a botanical perspective and a review of the assessment is neither required and nor would it materially change a decision.

Yours sincerely,

**Dr David J. McDonald Pr Sc Nat**  
**Botanical Specialist**



This map compares the approved layout (shown in blues) with the amended layout (shown in reds)

# ANNEXURE B.2

Noise





**Name:** Morné de Jager  
**Cell:** 082 565 4059  
**E-mail:** morne@eares.co.za  
**Date:** 4 November 2019  
**Ref:** Wolf WEF/Amend 4

Aurecon South Africa  
Bloemhof Building  
65 York st  
George

**Attention: Mr. Patrick Killick**

Dear Sir

**SPECIALIST STUDY: NOISE IMPACT ASSESSMENT: PROPOSED WOLF WIND ENERGY FACILITY NEAR KIRKWOOD: CHANGE OF ENVIRONMENTAL AUTHORIZATION**

The above-mentioned issue and report A-JWWF/ENIA/201406-Rev 0 is of relevance.

Enviro-Acoustic Research cc was commissioned to undertake a specialist study to determine the potential noise impact on the surrounding sound environment due to the establishment of the Wolf Wind Farm near Kirkwood, Eastern Cape Province. The facility is to be developed by Wolf Wind Farm (Pty) Ltd. The facility proposed to accommodate up to 28 turbines appropriately spaced wind turbines (of which 24 were approved). The noise study used the sound power emission levels of a wind turbine with a high sound power emission level of 109 dBA (which is at the high end of the noise spectrum for commercial turbines and was used as it would represent the worst-case-scenario, at the time).

With the input data as used, this assessment indicated that the potential noise impact would be of a low significance during the construction phase that can increase to medium during the operational phase (only for Noise Sensitive Development No 3 (NSD03)). It should be noted that the dwelling at NSD03 is not occupied permanently and only used over weekends and holidays although this was not considered in the probability analysis. The nearest turbine position (to NSD03) was also one of the four turbines excluded from the Authorisation (taking the applications from 28 to 24 turbines).

Following the completion of the specialist investigations and the issuance of the Environmental Authorisation, *juwi* Renewable Energies (Pty) Ltd on behalf of Wolf Wind Farm (Pty) Ltd, wishes to amend the Environmental Authorisation to make provision for diameter larger turbine (in line with current market trends).

Wolf Wind Farm (Pty) Ltd is seeking approval to increase the rotor diameter from the approved 160m (from the proposed amendment 2) to  $\leq 186$ m (proposed amendment) and the turbine tower height from 110m to  $\leq 135$ m. With larger turbines the number of turbines positions being applied for decreases from 24 to 21 (max), although even fewer are likely to be constructed (i.e. if 6MW turbines are used then only 15 turbines will be needed to reach the 90MMW facility capacity) – layout depicted in **Figure 1**. Turbine positions 1, 2 and 16 have been ceded in this amendment. Also, to better avoid bat buffers with the larger turbines blades, eight turbines have been moved slightly or micro sited (see map on overleaf).

These changes are unlikely to affect the noise impact profile and the findings of the original noise impact report since the distance between the various NSDs and the nearest turbines are not affected by the changes, with the exception of NSD06 who is now further away, but was originally assessed to receive a “very low (-)” noise impact, and the changes are unlikely to affected this finding or the overall impact profile.

While newer turbines are trending toward larger rotor diameters they are also trending toward lower noise levels. This is because, as wind turbines evolve, manufacturers are addressing the noise emission levels in the newest wind turbine models and it is possible that the latest wind turbine models will be quieter than the wind turbine model considered for the Environmental Noise Impact Assessment. It is therefore likely that proposed amendment will result in a lower noise level than that used as the basis for the impact assessment in the Original EIA, but the difference is negligible.

In conclusion, provided that the selected wind turbine model has a sound power emission level equal or less than 110dBA, the changes will not alter the impact profile and findings of the Environmental Noise Impact Report. The results, findings, any mitigation measures, recommendations and conclusions would remain the same. The significance of the noise impact would remain as originally assessed and it will not be necessary to review the report, findings, recommendations and conclusions. The original noise impact assessment would still be valid and no additional noise studies will be required.

In the unlikely event that a wind turbine model with a sound power emission level higher than 110dBA is selected, then a noise specialist must be commissioned to revise the noise model and advice on turbine micro-siting to ensure that noise at the nearest sensitive receptors are kept within specified limits. This should be included as a condition in the amended authorisation.

Should you require any further details, or have any additional questions, please do not hesitate to call me on the above numbers.

Yours Faithfully,



Morné de Jager  
Enviro-Acoustic Research cc

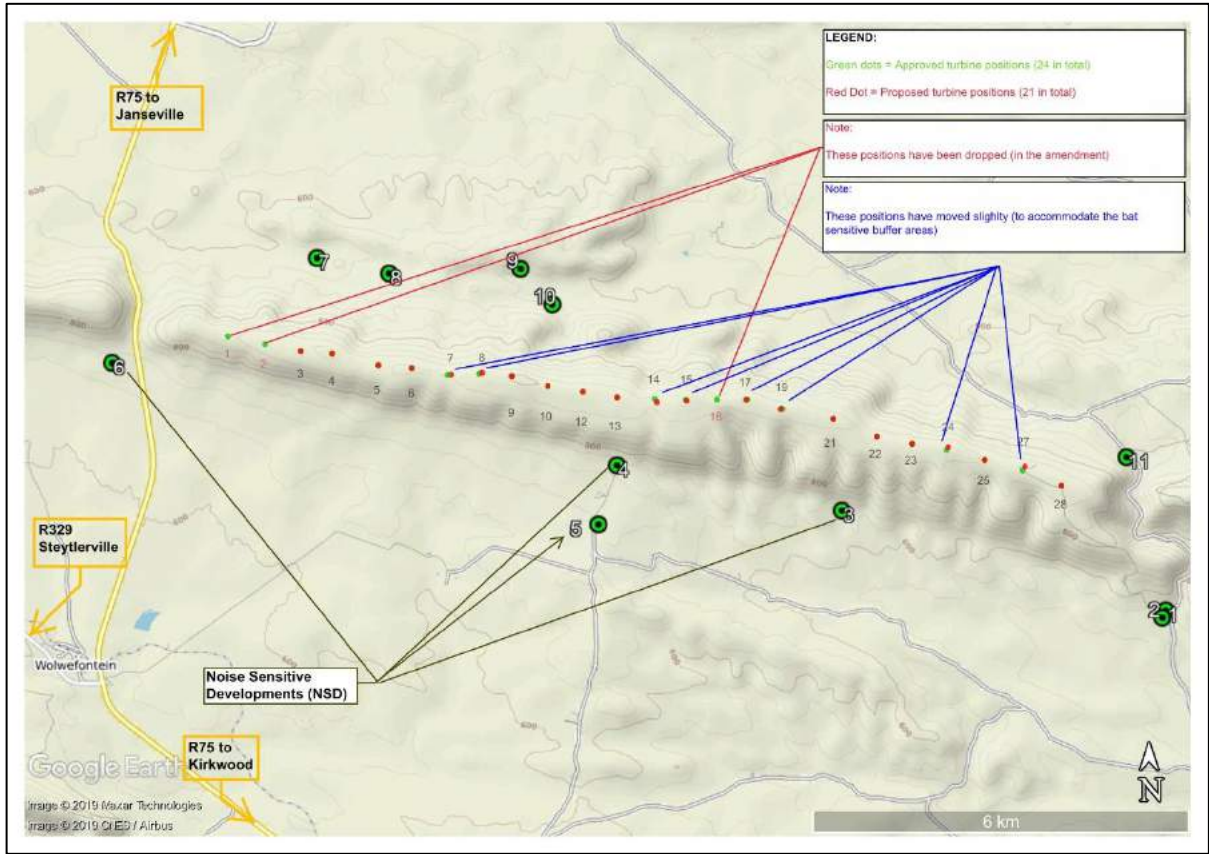


Figure 1 : Proposed changes to layout

# ANNEXURE B.3

Socioeconomic

30 January 2020

To whom it may concern,

Re: EA Amendment of Wolf Energy Facility

Urban-Econ was appointed by Aurecon South Africa (Pty) Ltd (Aurecon) in 2013 to undertake a specialist socio-economic impact assessment study on behalf of juwi Renewable Energies (Pty) Ltd (juwi) for the development of a Wind Energy Facility. The purpose of this study was to undertake the research to produce a specialist report for the Environmental Impact Assessment for the envisaged project.

In the initial development concept, juwi proposed to construct a Wind Energy Facility and associated infrastructure with a generation capacity of 80 MW on farms near Wolwefontein. The proposed wind energy facility would comprise of 28 turbines, a hub height of up to 100m with three 60m long blades. However, in 2019, due to ongoing developments in the turbine market, juwi decided to amend their EA application to allow for an increased wind turbine envelope and to allow for larger wind turbines at the Wolf Energy Facility, in line with the marketplace.

The generation capacity for the Wolf Energy Facility would remain the same (i.e. at 90MW) but an increase in the turbine size (physical specs and generation capacity per turbine) would be required. With larger turbines the number of turbines required has been reduced from 24 to 21, while is expected that even fewer would ultimately be installed. The 21 turbines would only be installed in the event the smaller turbines are used. To gain an understanding of the amendment history an overview is provided in Table 1~

**Table 1: Amendment History**

Aspect	Original EIA	Amendment 1	Amendment 2	Proposed now
<b>No Turbines</b>	24	24	24	21
<b>Rotor diameter</b>	126m	≤137m (Δ =11m)	160m (Δ =23m)	186m (Δ =26m)
<b>Hub height</b>		100m	110m (Δ =10m)	135m (Δ =25m)
<b>Electrical generator</b>	3.5MW	3.5MW	3.5MW	Not specified
<b>Overall generation</b>	84MW	≤90MW (Δ =6MW)	≤90MW	≤90MW

The initial Socio-Economic Impact Assessment conducted in 2013, identified several impacts based on the development concept provided. These concepts are highlighted in Table 2.

**Table 2: Initial Impacts Assessed**

Positive impacts	Negative impacts
Impact on the Economy	Impact on In-migration
Impact on Investment	Impact on Economic & Social Infrastructure
Impact on Employment & Skills Transfer	Impact on Tourism and Game Farming
Consistency with development planning	
Increase in household earnings	

Based on an understanding provided by Aurecon combined with Urban-Econs experience in similar projects it was determined that the proposed changes envisioned by juwi would not result in any significant change in any of the socio-economic impacts identified in the table above and assessed previously. If resultant change were to occur, it would be marginal and would not impede the impact assessment ratings and mitigation measures would remain unchanged. To conclude, Urban-Econ assessed the proposed amendments and confirms that the proposed changes to the Wolf Energy Facility would not change the scope, nature or level on impact and therefore would therefore not require an amendment/ review of the initial socio-economic impact assessment.

Yours sincerely,

**Marcel Theron**



For URBAN-ECON Development Economists (Pty) Ltd

Development economist

[marcel@urban-econ.com](mailto:marcel@urban-econ.com)

# ANNEXURE B.4

Heritage



Date: 11 November 2019

Aurecon South Africa (Pty) Ltd  
PO Box 509,  
George  
6530  
South Africa

**RE: PROPOSED AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION: WOLF WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR WOLWEFONTEIN WITHIN THE IKWEZI LOCAL MUNICIPALITY IN THE EASTERN CAPE (14-12-16-3-3-2-599)**

Dear Patrick,

The application to amend the Environmental Authorisation (EA) dated 17 September 2015 for the Wolf Wind Farm, near Wolwefontein in the Eastern Cape (DEA Ref.:14/12/16/3/3/2/599) has reference.

In my capacity of Heritage specialist and having undertaken the original impact assessment for the project in May 2014, I hereby note Wolf Wind Farm (Pty Ltd would like to amend the EA to make provision for the following:

1. Increase tower height from  $\leq 110\text{m}$  to  $\leq 135\text{m}$ ;
2. Increase max Rotor diameter from  $\leq 160\text{m}$  to  $\leq 186\text{m}$ ;
3. Total turbine positions decrease from  $\leq 24$  to  $\leq 21$ ; and
4. Micrositing 8 turbine positions to avoid bat sensitive areas:

Having considered the original assessment in light of the proposed amendment I confirm that the proposed changes would **not**:

- a. result in any new impacts,
- b. change the nature or scope of the impacts already assessed, or
- c. materially change the impact significance rating or associated mitigation recommendations originally presented.

Therefore, the proposed amendment would have no significant effect on the impact profile from a Heritage perspective and a review of the assessment is neither required and nor would it materially change a decision.

Please contact me if you require further information.

Yours sincerely

Tim Hart (director)



# ANNEXURE C

## SPECIALIST REVIEWS

# ANNEXURE C.1

Visual

# **PROPOSED WOLF WIND ENERGY FACILITY, EASTERN CAPE PROVINCE**

## **AMENDMENT: COMPARATIVE VIEWSHED ANALYSIS AND VISUAL ASSESSMENT**

**Produced for:**



**On behalf of:**



PO Box 494, Cape Town 8000  
Aurecon Centre, 1 Century City Drive  
Waterford Precinct, Century City Cape Town, 7441

T: 021 526 9400 F: 021 526 9500

**Produced by:**



Lourens du Plessis (GPr GISc) t/a LOGIS  
PO Box 384, La Montagne, 0184  
M: 082 922 9019 E: lourens@logis.co.za  
W: logis.co.za

**- November 2019 -**

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Lourens du Plessis, a specialist in Visual Impact Assessment (VIA) and Geographical Information Systems (GIS), undertook the comparative viewshed analysis and visual assessment for the proposed amendment. Lourens also undertook the visual assessment for the previous Wolf Wind Energy Facility (WEF) amendment (submission date May 2018).

Lourens has been involved in the application of Geographical Information Systems (GIS) in Environmental Planning and Management since 1990. He has extensive practical knowledge in spatial analysis, environmental modeling and digital mapping, and applies this knowledge in various scientific fields and disciplines. His expertise is often utilised in Environmental Impact Assessments, State of the Environment Reports and Environmental Management Plans.

He is well-versed with the "Guidelines for Involving Visual and Aesthetic Specialists in EIA Processes" (Provincial Government of the Western Cape: Department of Environmental Affairs and Development Planning) and utilises the principles and recommendations stated therein to successfully undertake visual impact assessments.

Aurecon (Environmental and Planning) appointed Lourens du Plessis as an independent specialist consultant to undertake the visual assessment for the proposed amendment to the Wolf WEF. He will not benefit from the outcome of the project decision-making.

## 1 INTRODUCTION

**juwi Renewable Energies (Pty) Ltd, via its subsidiary Wolf Wind Farm (Pty) Ltd,** wishes to amend the dimensions of their wind turbine generators (WTG) for the approved Wolf Wind Energy Facility (WEF), near Wolwefontein in the Eastern Cape

The intended amendment includes:

- Reduction in the number of turbines from **24** to a maximum of **21**;
- Increase in rotor diameter from up to **160m** to up to **186m**;
- Increase in hub height from up to **110m** to up to **135m**; and
- Update of the **layout** to mitigate potential bat and avifaunal impacts.

The proposed amendment will reduce the number of wind turbines from 24 to a maximum of 21, a positive when considering the overall frequency of visual exposure of the WEF. However, the final number of wind turbines constructed may be even less, depending on future technological advancements in the generating capacity of the turbines. The intended total generating capacity of the facility is 90MW, which will not be exceeded. Therefore, the number of turbines ultimately constructed may decrease as the generating efficiency of the turbines increase. For the purposes of this study, the maximum number of wind turbines (21) is addressed, in order to cater for a worst case scenario.

The primary concern, from a visual impact perspective is the proposed increase in the dimensions of the 21 remaining wind turbines. The total maximum vertical dimension (height) of each wind turbine is expected to increase from up to **190m** (110m hub-height + 80m blade length) to up to **228m** (135m hub-height + 93m blade length) above ground level. This translates to a total **38m** maximum increase in blade tip height per WTG.

## 2 SCOPE OF WORK

The scope of work includes a comparative viewshed analysis and identification of potential sensitive visual receptors that may be influenced by the increase in dimensions of the WTGs. This is done in order to determine:

- If there are any additional visual receptors that may be negatively influenced by the amendment;
- Whether the increase in dimensions would significantly aggravate the potential visual impact on identified receptors (identified during the EIA phase);
- If there are any positive visual impacts associated with the removal of (a minimum of) three wind turbines;
- If additional impact mitigation measures are relevant; and
- To suggest amendments or additions to the Environmental Management Programme (EMPr) (if applicable).

## 3 METHODOLOGY

The visual assessment includes a comparative viewshed analysis in order to determine the visual exposure (visibility) of the original (authorised) turbine dimensions and layout compared to the potential (additional) exposure of the increased (proposed) turbine dimensions and revised layout. The viewshed analysis focuses on a radius of 20km from the proposed turbine layout (development footprint) and potential visual receptors located within this zone. The original VIA report determined that receptors, where visible, within this zone may experience a **high** visual impact of the proposed infrastructure.

Potential sensitive visual receptors include:

- Observers residing at homesteads (farm residences and dwellings) within the study area;
- Observers travelling along the arterial and secondary roads traversing near the proposed development site;
- Visitors to the Addo Elephant National Park; and
- Residents and visitors to other Game Lodges (tourist facilities) in the area.

#### **4 RESULTS OF THE COMPARATIVE VIEWSHED ANALYSIS**

A visibility analysis was undertaken from each of the wind turbine positions (24 in total) at an offset of 190m (maximum blade tip height) above ground level. The result of this analysis represents the potential total visual exposure of the original turbine dimensions (indicated in green). The viewshed analysis was repeated at an offset of 228m to indicate the visual exposure (shown in red) of the increased turbine dimensions and reduced number of turbines (21 in total). The results of the visibility analyses are displayed on **Map 1** below.

It is clear that the approximately **17%** increase in turbine dimensions, would have a relatively small influence on the overall visual exposure, due to the already tall turbine structures previously approved and the elevated location of the turbines on the Klein Winterhoek Mountains. The surface area (within the study area) of the original turbine exposure is **1,067km<sup>2</sup>**, compared to the **1,088km<sup>2</sup>** of the increased dimensions of the wind turbine exposure. This is an increase of **21km<sup>2</sup>**, or alternatively, an increase of less than **2%** in potential visual exposure.

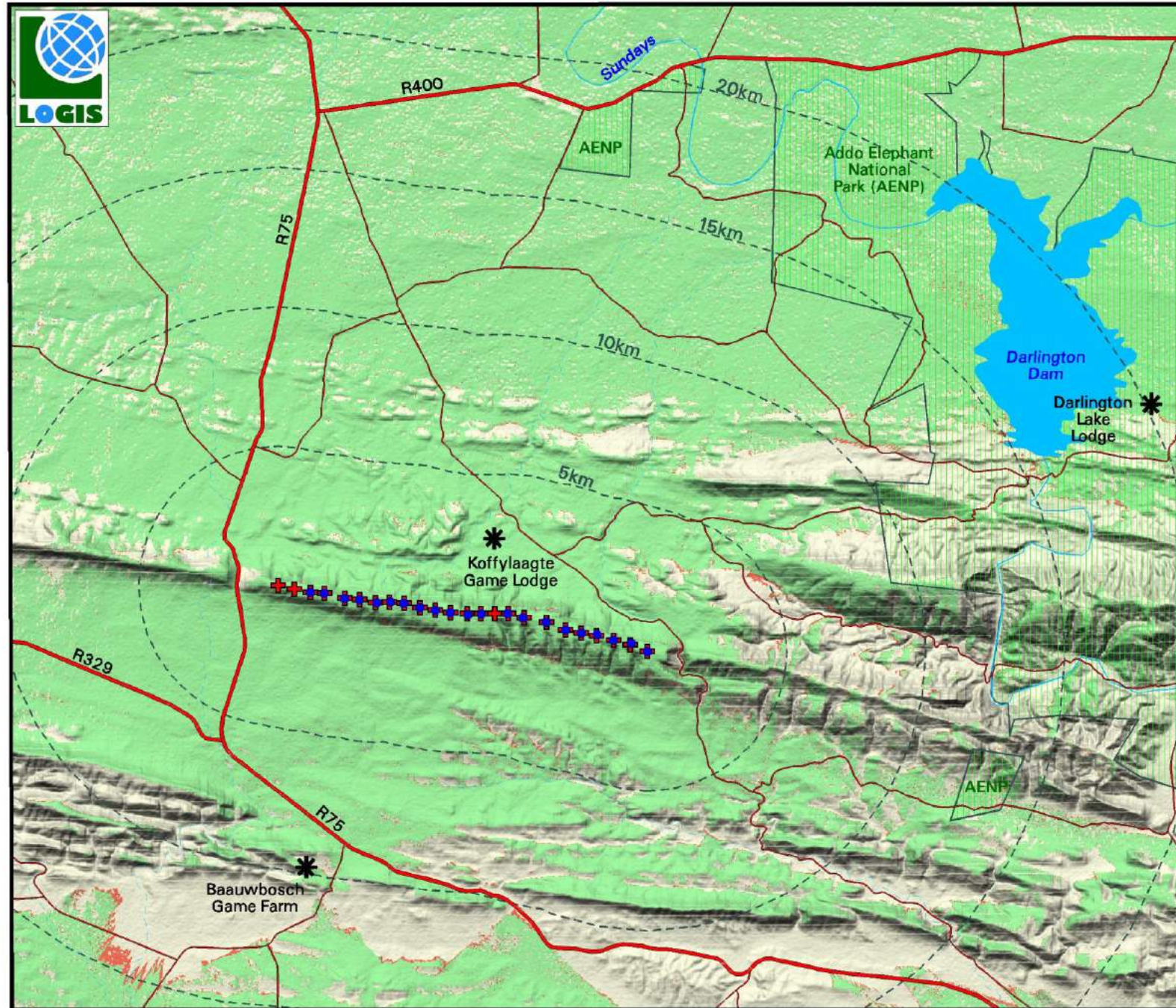
There are no additional sensitive visual receptors located within a 20km radius of the proposed amended turbines that would be influenced by the increase in visual exposure.

Potential sensitive visual receptors within a 20km radius (identified during the EIA phase) include:

- Addo Elephant National Park (AENP - especially the Darlington Lake Lodge and surrounds);
- The Koffylaagte Game Lodge;
- Blaauwbosch Game Reserve;
- AENP 4x4 Wilderness Trail; and
- Observers travelling along the R400, R75, R329 arterial roads and secondary roads.

The increased area of visual exposure does not include any additional exposure to major roads within the study area.

In spite of the reduction in the number of turbines it is expected that the wind turbine structures, both the original dimensions and the proposed increased dimensions would be equally visible and noticeable from both the roads and homesteads identified above. This signifies a negligible change to the overall potential visual impact.

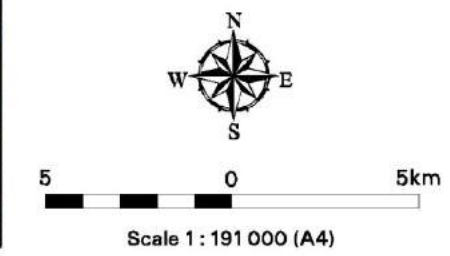


**Proposed Wolf Wind Energy Facility**  
**Amendment: Visual Assessment**

- LEGEND**
- Arterial Road
  - Secondary Road
  - Non-perennial River
  - Perennial River
  - Potential Sensitive Visual Receptor (from VIA)
  - EA Wind Turbine Position
  - Proposed Wind Turbine Position

- COMPARATIVE VIEWSHED ANALYSIS**
- Potential Visual exposure for: Authorised WTG Layout (24)  
 - 110m hub-height  
 - 160m rotor diameter
  - Potential additional area of exposure for: Proposed WTG Layout (21)  
 - 135m hub-height  
 - 186m rotor diameter
  - Observer proximity to the WTG

**Notes:**  
 - Visual exposure calculated from maximum blade tip height above ground level (i.e. sequentially 190m and 228m agl)



**Map 1:** Comparative Viewshed Analysis – Wolf Wind Energy Facility.

## 5 COMPARATIVE VISUAL ASSESSMENT STATEMENT

In consideration of the proposed amendment, there is no (zero) change to the significance rating compared with the original EIA visual impact assessment report. The reduction in the number of wind turbines is expected to reduce the frequency of visual exposure to some extent, although the remaining (larger) turbines are expected to remain visible within, but not restricted to, a 20km radius of the WEF.

## 6 CONCLUSION/RECOMMENDATIONS

The proposed increase in the dimensions of the wind turbine structures is **not expected to significantly alter** the influence of the WEF on *areas of higher viewer incidence* (observers traveling along arterial or secondary roads within the region) or *potential sensitive visual receptors* (residents and visitors to the region).

The proposed increase in turbine dimensions and the reduction in the number of turbines are consequently **not expected to significantly influence** the anticipated visual impact, as stated in the original VIA report (i.e. the visual impact is expected to occur regardless of the amendment). This statement relates specifically to the assessment of the visual impact within a 20km radius of the wind turbine structures (potentially **high** significance), but also generally apply to potentially **moderate** to **low** visual impacts at distances of up to 30km from the structures.

From a visual perspective, the proposed changes to the turbine dimensions and turbine layout will not alter the nature or scope of the visual impacts and therefore require no (zero) change to the significance rating within the original visual impact assessment report that was used to inform the approved EIA and the subsequent amendments thereafter. In addition to this, no new mitigation measures are required.

It is suggested that the proposed amendment to the turbine dimensions and layout be supported, subject to the conditions and recommendations as stipulated in the original Environmental Authorisation, and according to the Environmental Management Programme and suggested mitigation measures, as provided in the original Visual Impact Assessment report.

## 7 REFERENCES/DATA SOURCES

Chief Directorate National Geo-Spatial Information, varying dates. *1:50 000 Topo-cadastral Maps and Data*.

LOGIS, 2018. *Proposed Wolf Wind Energy Facility, Eastern Cape. Amendment: Comparative Viewshed Analysis and Visual Assessment*.

MetroGIS (Pty) Ltd, 2014 (Revised February 2015). *Visual Impact Assessment for the Construction of a Wind Energy Facility on the Klein Winterhoek Mountains, Eastern Cape*.

NASA, 2018. *Earth Observing System Data and Information System (EOSDIS). (30m Shuttle Radar Topography Mission Digital Elevation Model)*.





## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

### DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:	(For official use only)
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

#### PROJECT TITLE

**Proposed Wind Energy Facility and Associated Infrastructure on Wolf Wind Farm (Pty) Ltd, near Wolwefontein in the Eastern Cape**

#### Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

#### Departmental Details

##### Postal address:

Department of Environmental Affairs  
Attention: Chief Director: Integrated Environmental Authorisations  
Private Bag X447  
Pretoria  
0001

##### Physical address:

Department of Environmental Affairs  
Attention: Chief Director: Integrated Environmental Authorisations  
Environment House  
473 Steve Biko Road  
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:  
Email: [EIAAdmin@environment.gov.za](mailto:EIAAdmin@environment.gov.za)

**1. SPECIALIST INFORMATION**

Specialist Company Name:	Lourens du Plessis t/a LOGIS		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Exempt	Percentage Procurement recognition
Specialist name:	Lourens du Plessis		
Specialist Qualifications:	BA		
Professional affiliation/registration:	Professional GISc Practitioner (PGP0147) registered with the South African Geomatics Council (SAGC)		
Physical address:	531A Witogje Str. Die Wilgers, Pretoria		
Postal address:	PO Box 384, La Montagne		
Postal code:	0184	Cell:	082 922 9019
Telephone:		Fax:	
E-mail:	lourens@logis.co.za		

**2. DECLARATION BY THE SPECIALIST**

I, Lourens du Plessis, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the Specialist

Lourens du Plessis t/a LOGIS

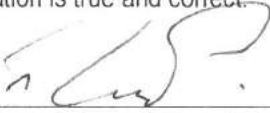
Name of Company:

2020/01/17

Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Lourens du Plessis, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.




Signature of the Specialist

Lourens du Plessis t/a LOGIS

Name of Company

2020/01/17

Date

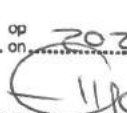
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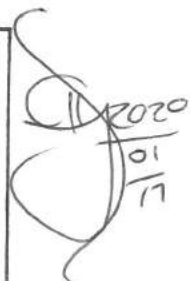
Signature of the Commissioner of Oaths

Date

2020/01/17



<p>Ek sertifiseer dat bostaande verklaring deur my afgeneem is en dat verklaarder erken dat hy/sy vertrouwd is met die inhoud van hierdie verklaring en dit begryp. Hierdie verklaring is voor my bevestig/bevestig en verklaarder se handtekening/merk/duimafdruk is in my teenwoordigheid daarop aangebring.</p>	<p>I certify that the above statement was taken by me and that the deponent has acknowledged that he/she knows and understands the contents of this statement. This statement was sworn to/affirmed before me and deponent's signature/mark/thumbprint was placed thereon in my presence.</p>
<p>te <u>Petria</u> op <u>2020/01/17</u> om <u>14:46</u> at <u>CH. Grows</u> on <u>CU321138</u> at <u>CH. Grows w/o</u></p>	<p></p>
<p>(HANDTEKENING) KOMMISSARIS VAN EDE (SIGNATURE) COMMISSIONER OF OATHS</p>	
<p><u>Henriette Grows</u> VOLLE VOORNAME EN VAN IN DRUKSKRIF FULL FIRST NAMES AND SURNAME IN BLOCK LETTERS</p>	
<p><u>Johnny Claassenstraat 277</u> BESIGHEIDSADRES (STRAATADRES) BUSINESS ADDRESS (STREET ADDRESS)</p>	
<p><u>Garsfontein</u> <u>w/o</u> RANG/RANK</p>	
<p>SA POLISIEDIENS SA POLICE SERVICE</p>	



# ANNEXURE C.2

Bats

08 November 2019

## Proposed amendment to the Environmental Authorisation (EA) for the Wolf Wind Energy Facility (WEF) – implications for bats

Animalia Consultants (Pty) Ltd completed the bat EIA impact assessment and preconstruction monitoring in 2014 for the Wolf Wind Energy Facility (WEF), in addition provided input to EA Amendments in 2016 and 2018 to accommodate turbine dimensions changes. Due to market forces, the applicant wishes to apply for another EA amendment to increase the approved turbine dimensions, and, this time, reduce the number of turbines and microsite certain turbines. Table 1 provides a summary of the proposed changes in comparison to what is currently authorised.

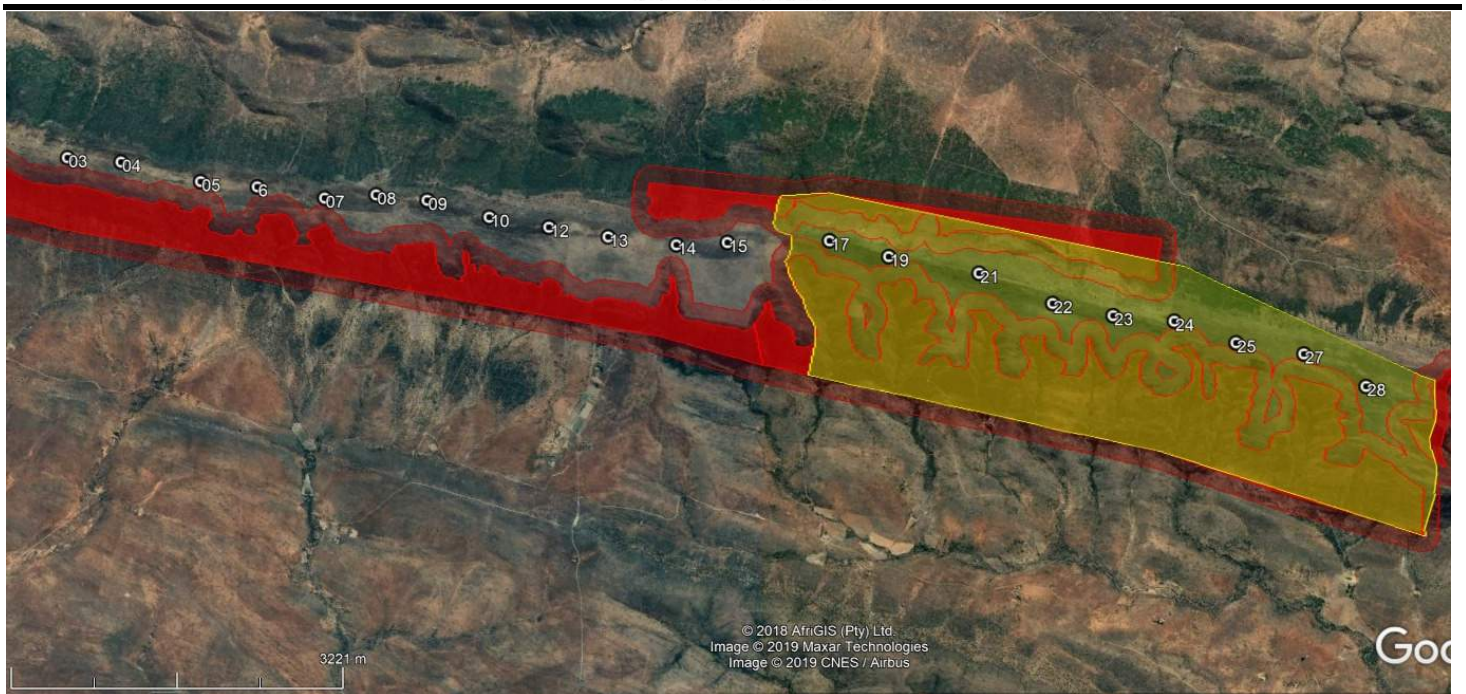
**Table 1:** Proposed changes to the current EA.

Aspect	Authorised	Proposed amendment
Overall wind farm capacity	90MW	90MW
Rotor diameter	≤160m	≤186m
Hub height	≤110m	≤135m
Minimum rotor swept tip height	not less than 30m	not less than 30m
Maximum rotor swept tip height	≤190m	≤228m
Number of turbines	≤24	≤21 (Turbines 1, 2 and 16 removed from the authorised layout)
Turbine layout positions	As currently authorised	micrositing turbines 7, 8, 14, 15, 17, 19, 24 and 27
Overall rotor swept airspace	24 turbines x 160m RD: 482,549 m <sup>2</sup>	21 turbines x 186m RD: 570,604 m <sup>2</sup> (18% increase in overall swept area)

Due to recent insights regarding necessary buffer distances for high bat sensitivities, the buffer distances of the bat sensitivity map were revised upwards from 150m to 200m, to align with the latest *South African Good Practice Guidelines for Surveying Bats at Wind Energy Facility Developments - Pre-construction: Edition 4.1*. (Sowler, et al., 2017). The reduction of the number of turbines as well as micrositing of turbine positions respects and accommodates the updated bat sensitivity map. Figure 1, on the overleaf, indicates the sensitivity map with updated high bat sensitivity buffers, in relation to the proposed amended turbine layout.

When considering the lower elevations of the high bat sensitivities in relation to turbine base positions, apart from turbines 27 and 28 (see image below), all of the turbine rotor swept zones will be outside of the required 200m setback from the sensitive zones. Turbines 27 and 28 will intrude only 3.4m and 2.5m into the high bat sensitivity buffer zones, this intrusion is considered minimal and may be overcome if required (determined by final turbine selection) by micro-siting these two turbines in the final design, pre-construction.

During the long-term preconstruction monitoring study, bat activity was measured to be significantly higher at 10m than at 50m, indicating a clear reduction in activity with an increasing height above ground. Therefore, even though the total rotor swept airspace is greater with the proposed amendments, the increased maximum rotor tip height is not expected to increase risks of impacts to bats. The minimum authorised rotor swept height of 30m remains unchanged and acceptable, although it's likely that the larger turbine models within the envelope would in fact increase minimum rotor swept height, which can reduce the risks of impact to bats.



**Figure 1:** Bat sensitivity map with increased high sensitivity buffers. White dots = proposed 21 turbine layout base locations; Solid red = high bat sensitivities; Opaque red = 200m high bat sensitivity buffer; Yellow = moderate bat sensitivities.

The proposed micrositing of 8 turbines in the proposed layout, as well as the reduction in the number of turbines (from 24 to 21), respects the bat sensitivity map and may further decrease the risk of impacts on bats. It's also likely that larger and more efficient turbine models may be available in future, further reducing the number of turbines installed. In such a case, from a bat sensitivity perspective only, the turbines that should be dropped from the layout in order of preference are as follows: Turbines 27, 28, 24, 05, 07, 14 and 19 (thereafter, from, east to west).

Animalia has reviewed the proposed amendment, and all the assessment of impacts as well as the mitigation measures specified in the EIA phase bat assessment and preconstruction study remain unchanged by the proposed amendment. Even though in a broader spectrum, the proposed amendments may reduce the risk of impacts on bats, which is seen as generally positive, the reduced risks are not sufficient enough to change the impact significance ratings or recommended mitigations determined of the original study.

In summary, the proposed amendments are acceptable from a bat sensitivity perspective.

If there are any queries, please do not hesitate to contact me.

Werner Marais  
Managing Director  
werner@animalia-consult.co.za  
Pr.Sci.Nat. (Zoological Science) 400169/10

**Specialist declaration**

The Specialists Declaration forms did not arrive via post in time for print and will be included in the final

# ANNEXURE C.3

Birds



# WOLF WIND ENERGY FACILITY

PART 2 AMENDMENT

AVIFAUNAL STATEMENT



**January 2020**

Compiled by:

WildSkies Ecological Services (Pty) Ltd

Jon Smallie

[jon@wildskies.co.za](mailto:jon@wildskies.co.za)

Submitted to:

Aurecon

Patrick Killick

[patrick.killick@aurecongroup.com](mailto:patrick.killick@aurecongroup.com)

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## 1. BACKGROUND

WildSkies Ecological Services (Pty) Ltd (hereafter WildSkies) was contracted by juwi Renewables (hereafter juwi) to conduct 12 months of pre-construction bird monitoring for the Wolf Wind Energy Facility (in 2013-2014), and subsequently contracted by Aurecon to conduct the avifaunal impact assessment study as part of the Environmental Impact Assessment (in 2014). Two further amendments to the turbine envelope were assessed in May 2016 and May 2018 (WildSkies 2016, WildSkies 2018). Juwi now propose to make a further change to the planned turbine (Amendment III). This is shown in Table 1 below.

Table 1. Summary of amendments on the Wolf project.

Aspect	Original EA	Amendment I (approved)	Amendment II	Amendment III - proposed
Number of turbines	24*	24	24	≤21
Rotor diameter	126m	≤137m (Δ=11m)	≤160m (Δ=23m)	≤186m (Δ=26m)
Hub height	100m	≤100m	≤110m (Δ=10m)	≤135m (Δ=25m)
Lower blade tip height above ground	37m	≥31.5m	≥30m	≥30m
Upper blade tip height above ground	163m	≤168.5m	≤190m	≤228m
Electrical generator	3.5MW	3.5MW	NA	NA
Overall generation	≤84MW	≤90MW (Δ=6MW)	≤90MW	≤90MW

*\*Note that the original EIA assessed 28 turbine positions, but only 24 were authorised*

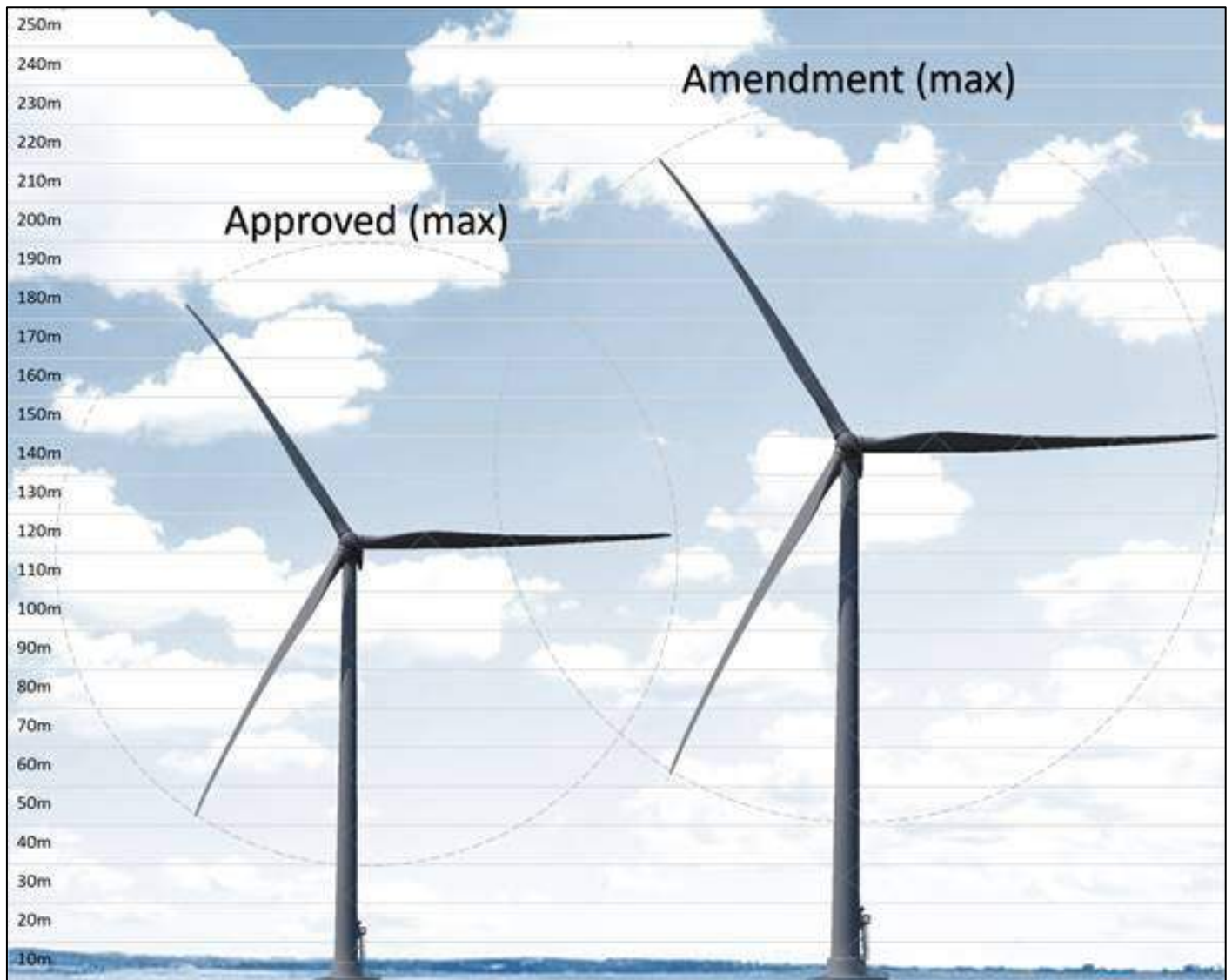


Figure 1-1. The approved turbine versus proposed amendment turbine (from Aurecon).

The rotor swept area for the entire wind farm was previously 482 549m<sup>2</sup> (24 x 160m rotor diameter) and under the current application it would increase to 570 604m<sup>2</sup> (21 x 186m rotor diameter). This is a worst case scenario increase of 18% in combined swept area.

WildSkies was asked by Aurecon to compile a statement with regard to the effects that the proposed change may have on avifauna, as per the following terms of reference:

- » Undertake a review of the original specialist report with respect to the proposed increased wind turbine envelope, including the changes shown in the above table
- » Provide a provisional estimate as to how likely the change is to result in a change to impact significance (as per the original basement, i.e. remote, unlikely, likely, very likely, almost certain)
- » Compile a short report / statement describing whether the proposed change in the wind turbine envelope would result in a change to impact significance ratings as contained in the original assessment, and if so, to update the impact assessment table by applying the assessment methodology used in the original EIA.
- » Where and only if required, provide any additional mitigation measures / recommendations for inclusion into the EMPr to address any concerns associated with the revised turbine envelope.

## 2. ORIGINAL AVIFAUNAL IMPACT ASSESSMENT FINDINGS

The findings of the original EIA avifaunal report (Smallie, 2014) are shown in Table 2. The findings of the most recent amendment (Amendment II in May 2018) are also shown.

Table 2. Summary of impact ratings.

Impact	Original Assessment (Smallie, 2014)	Amendment II – May 2018
Habitat destruction	MEDIUM	Unchanged by proposed amendment
Disturbance of birds	LOW	Unchanged by proposed amendment
Displacement of birds	LOW	Unchanged by proposed amendment
Collision of birds with turbine blades	MEDIUM	Unchanged by proposed amendment
Collision and electrocution of birds with and on the grid connection power line	HIGH	Unchanged by proposed amendment.

## 3. EFFECT OF AMENDMENT ON RISK TO BIRDS

The proposed changes to the facility are discussed in more detail below:

### 3.1. Proposed changes to rotor swept area

The turbine model is to be changed from a hub height of up to 110m and rotor diameter of up to 160m to a hub height of up to 135m and rotor of up to 186m. Two aspects of this change in turbine model are relevant to assessing bird turbine collision risk:

- A. The change in height above ground at which the rotor will be; and
- B. The change in overall size of rotor.

#### a) Change in height

Smallie (2014) identified 5 bird species as being at most risk of collision with turbine blades at the Wolf WEF site, based on flight activity data collected on site over four seasons of pre-construction bird monitoring. These are presented in Table 3 below.

Table 3. Top priority bird species identified by Smallie 2014. (n= number of records)

Species	EIA finding – Smallie, 2014	Implications of proposed amendment (change in height of rotor zone only)
Rock Kestrel	The Rock Kestrel was found to fly at an average height above ground of 28m (n=14).	<u>No change</u> The new proposed turbine does not change at the lower blade tip of 30m above ground.
Jackal Buzzard	Jackal Buzzard flew at an average height of 80m (n=14), and was adjudged to be at risk of collision with turbine blades.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
Booted Eagle	Booted Eagle flew at an average height of 51m (n=9), and was adjudged to be at risk of collision with turbine blades.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
Verreaux’s Eagle	Verreaux’s Eagle flew at an average height above ground of 75m (n=9) and was judged to be at risk of collision.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
Pale Chanting Goshawk	Pale Chanting Goshawk flew at an average height above ground of 74m (n=4) and was judged to be at risk of collision.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.
All target bird species combined (14 species)	Average flight height above ground of 52m.	<u>No change</u> The average flight height is contained within both the original and proposed rotor zones.

We conclude that the change in turbine blade height above ground does not materially change the collision risk posed to birds, and hence would not affect our original findings.

**b) Change in rotor size**

The combined effect of original authorisation (i.e. minus four turbines) and multiple amendments to the turbine model over recent years means an overall facility increase, from an assessed collision risk window of 349,131m<sup>2</sup> to 570,604m<sup>2</sup>. This is a cumulative increase of up to 63% as explained below. If all things were equal this would imply a 63% increase in bird collision risk at the Wolf WEF site.

However not all factors are equal. As illustrated in Figure 2 below, since the lower tip height of the proposed new rotor remains relatively unchanged, most of the change in rotor swept area comes at the upper blade tip, which is above the height at which we recorded most bird flights. None of the priority species recorded flying on site had average flight heights anywhere near the upper blade tip height of 190 to 228m (See Table 2). Thus increases at the upper altitudes will not increase the collision risk.

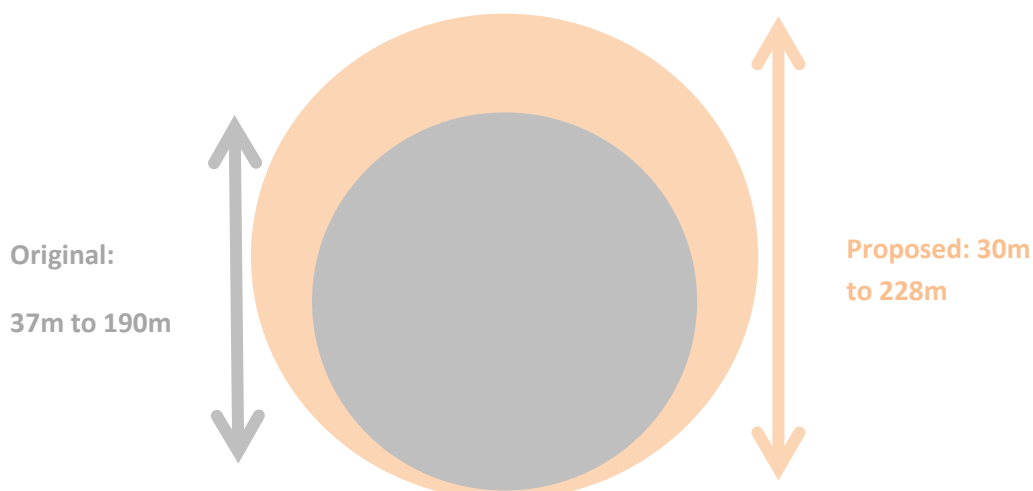


Figure 3-1. Indicative diagram of the original and proposed rotor swept areas. Not to scale.

In order to further illustrate this point, we calculated the cumulative increase in rotor swept area at and below a certain altitude (in 10m increments) as shown in Figure 3. This figure can be interpreted as follows: below 80m (where most recorded bird flight took place) the total change in swept area has increased by 5% (for all amendments) as compared with the assessed original, or below 150m the total cumulative increase would amount to 17%. In other words, at the heights that we recorded relevant bird species flying, the increase in rotor swept area is fairly low when compared to the assessed original. To illustrate this the area below 100m altitude (or 80m plus a precautionary 20m) has been marked as the high collision zone, and here we only see a cumulative 6% increase over the assessed original.

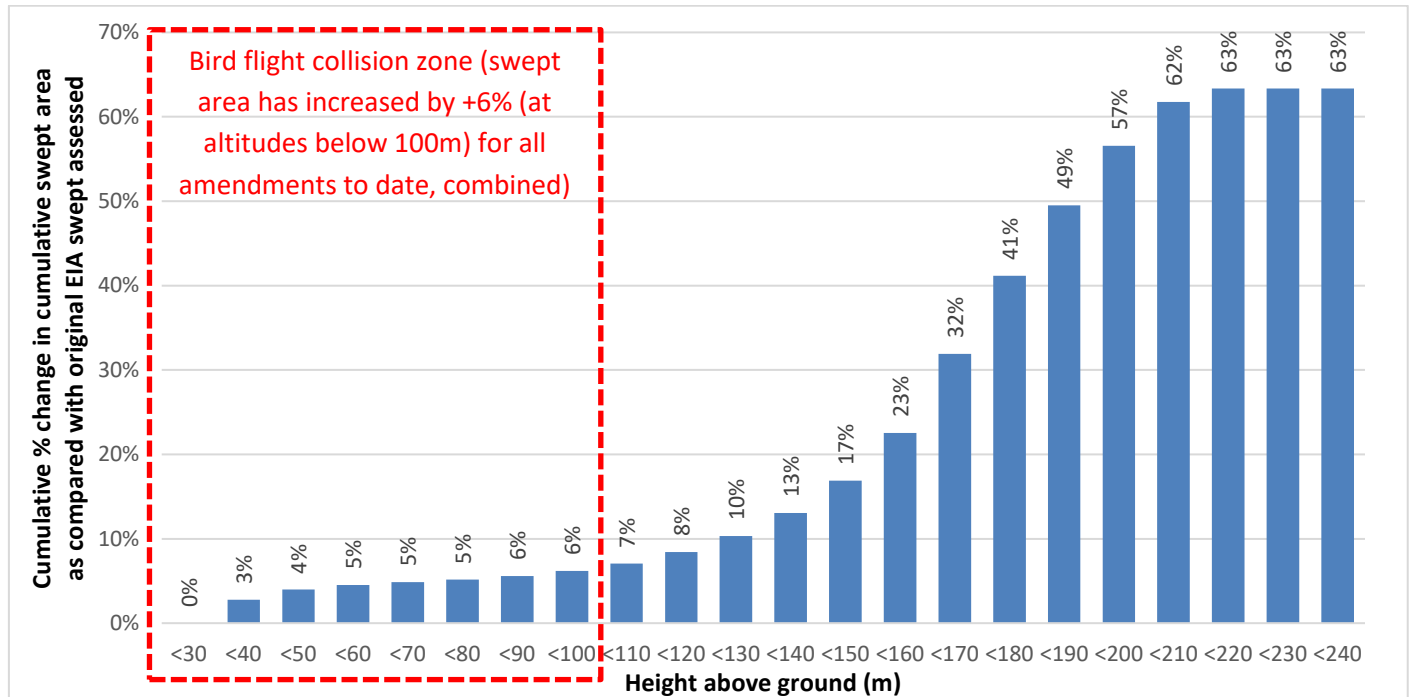


Figure 3-2. Cumulative change in rotor swept area (WCS).

We conclude then that the actual realised increase in collision risk to the relevant bird species flying on the Wolf site as a result of the current proposed amendment, considered together with the previous amendments, will not be sufficient enough to increase the significance rating from Medium (-) when considering the Worst-Case Scenario.

We have assessed a worst case scenario with respect to turbine numbers and size. The number of turbines will most likely reduce further by the time of construction, in order to stay within the authorised 90MW for the facility. A reduction in the number of turbines would likely reduce the swept area in the higher bird collision risk altitudes, reducing the risk of bird collision. Larger turbine models could also result in the lower turbine blade tip being higher above ground than is currently proposed (30m) which would also reduce bird collision risk, as most bird flight is concentrated at the lower altitudes.

Should the number of turbines required to meet the 90 MW generation capacity be reduced to less than 21 turbines, we request that the following turbines (in order of priority) be dropped from the layout: 17; 19; 21; 22; 25; 24; 23; 27; and 28.

### 3.2. Changes to proposed facility layout

The layout will need to change to accommodate the reduction from 24 to 21 turbines. The two layouts are presented in Figure 3 overleaf. The new layout is slightly better for avifauna as the most western end turbines (1 & 2) have been dropped, along with T16 (which was quite close to one of the north-south running valleys which are sensitive).





Figure 3-3. Comparative turbine layout (original – white; new – yellow).



#### 4. LAND USE CHANGES

We examined the land use change in the study area using the Google Earth 'View Historical Imagery' function (Figure 4). This work revealed that no significant and obvious land use change has taken place on site.



Figure 4-1. Historical (2014 - top) and current (2019 – bottom) Google Earth images for the site.

## 5. OTHER NEW INFORMATION RELEVANT TO THIS STATEMENT

### 5.1. Changes to bird species conservation status

The priority species identified by the original assessment are presented below in Table 4. Since the original assessment, the conservation status of many of the priority bird species seen at the site has changed, mostly for the worse. Seven of the nine species in Table 4 have been upgraded, that is they are now more at risk of extinction. This increases the significance of any impacts on the species. This has been considered in Section 7. Two species have been downgraded.

Table 4. Summary of bird species conservation status changes.

Common name	Species	Barnes 2000	Taylor <i>et al</i> , 2015	Change
Eagle, African Crowned	<i>Stephanoaetus coronatus</i>	NT	VU	Upgrade
Eagle, Martial	<i>Polemaetus bellicosus</i>	VU	EN	Upgrade
Eagle, Verreaux's	<i>Aquila verreauxii</i>	LC	VU	Upgrade
Falcon, Lanner	<i>Falco biarmicus</i>	NT	VU	Upgrade
Falcon, Peregrine	<i>Falco peregrinus</i>	NT	LC	Downgrade
Harrier, Black	<i>Circus maurus</i>	NT	EN	Upgrade
Kestrel, Lesser	<i>Falco naumanni</i>	VU	LC	Downgrade
Secretarybird	<i>Sagittarius serpentarius</i>	NT	VU	Upgrade
Stork, Black	<i>Ciconia nigra</i>	NT	VU	Upgrade

### 5.2. Best practice guidelines for wind energy & birds (updates)

Subsequent to the original assessment, the 'Best Practice Guidelines for Birds and Wind Energy' have been written (2011) and updated (Jenkins *et al*, 2015). There are no new implications for the Wolf WEF project in these guidelines.

A species specific guideline for Verreaux's Eagle has also been written by Birdlife South Africa (Birdlife South Africa), which is relevant at the Wolf site as the species does occur in the area. These guidelines stipulate that if a site is judged to be high risk for Verreaux's Eagle, extra monitoring is done (including a nest survey), and that a No-Go buffer of at least 3km be placed around any Verreaux's Eagle nests. Although these guidelines were not applicable when the original Wolf assessment was done, the project does comply with the requirement to do a nest survey. No nests were found by this survey on site. This coupled with bird flight activity data collected on site (which include a low passage rate for Verreaux's Eagle) result in the site being classified as low sensitivity for the species.

### 5.3. Lessons learnt at operational wind farms in South Africa

Ralston-Paton, Smallie, Pearson and Ramalho (2017) reviewed the results from one year of post-construction (operational-phase) monitoring of birds at seven wind farms constructed under the first phase of the REIPPPP. A summary of the reviews' findings (those relevant to the Wolf WEF) is as follows:

#### a) Displacement, disturbance, avoidance of sites by birds

No conclusive evidence of displacement of bird species once turbines were constructed was found. A similar finding was made for disturbance and avoidance. Although some species observed during pre-construction were not observed during the operational phase, and vice versa, there was little conclusive evidence for displacement of priority species from any sites. This is however a relatively simplistic and short-term conclusion and may change with more in depth and longer term analysis.

#### b) Turbine collision fatalities

In the first year of operation, 271 bird fatalities were recorded at the seven wind farms (285 turbines) that were regularly surveyed in accordance with the BirdLife South Africa/EWT Best Practice Guidelines. This represents an average of 0.95 birds per turbine per year (range 0.2 – 2 birds per turbine per year. When adjusted for searcher

efficiency and carcass persistence (by methods in line with international best practice) the estimated fatality rates ranged from 2.1 to 8.6 birds per turbine per year, with a mean of 4.1.

Species were divided into broad groups and the number affected by collisions in each group is summarised in Figure 5 (extracted from Ralston-Paton *et al*, 2017). Raptors and passerines are two groups most affected, echoing patterns observed elsewhere in the world (Rydell *et al.*, 2012).

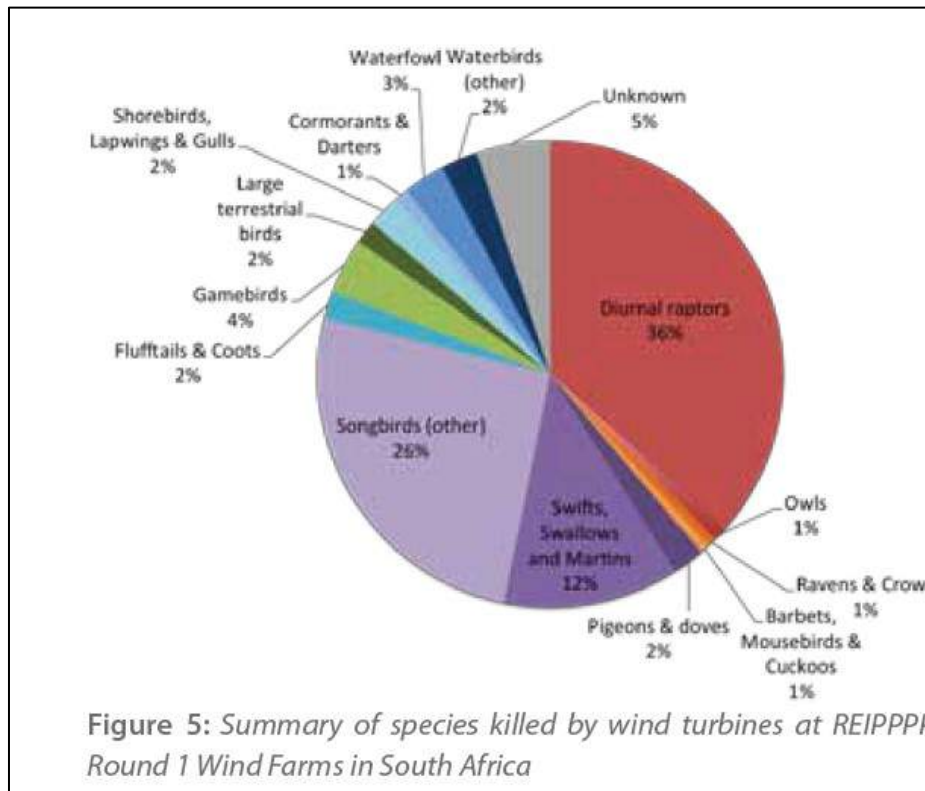


Figure 5-1. Summary of turbine collision fatalities by family (from Ralston-Paton *et al*, 2017).

Threatened species affected by collisions with wind turbines included Cape Cormorant (*Phalacrocorax capensis*, regionally Endangered), Blue Crane (*Anthropoides paradiseus*, Near Threatened), Martial Eagle (*Polemaetus bellicosus*, Endangered), Verreaux’s Eagle (*Aquila verreauxii*, Vulnerable), Lanner Falcon (*Falco biarmicus*, Vulnerable), Striped Flufftail (*Sarothrura affinis*, Vulnerable) and Black Harrier (*Circus maurus*, Endangered) (Taylor *et al.* 2015). Although not currently threatened, the high number of Jackal Buzzard (*Buteo rufofuscus*) fatalities is also of note. This species is near endemic to South Africa.

Since the original assessment at the Wolf site (where the susceptibility of species to turbine collisions was speculated) a number of species have proven to actually be susceptible.

## 6. COMPARATIVE SENSITIVITY MAPPING

The two layouts, old and new are presented below with the sensitivity mapping (Figure 6), in order to allow comparison. Only two turbines (24 & 25) are very slightly within the Medium sensitivity area identified previously. This is acceptable for avifauna in our opinion. It must be noted that this orange area is Medium sensitivity, not High.

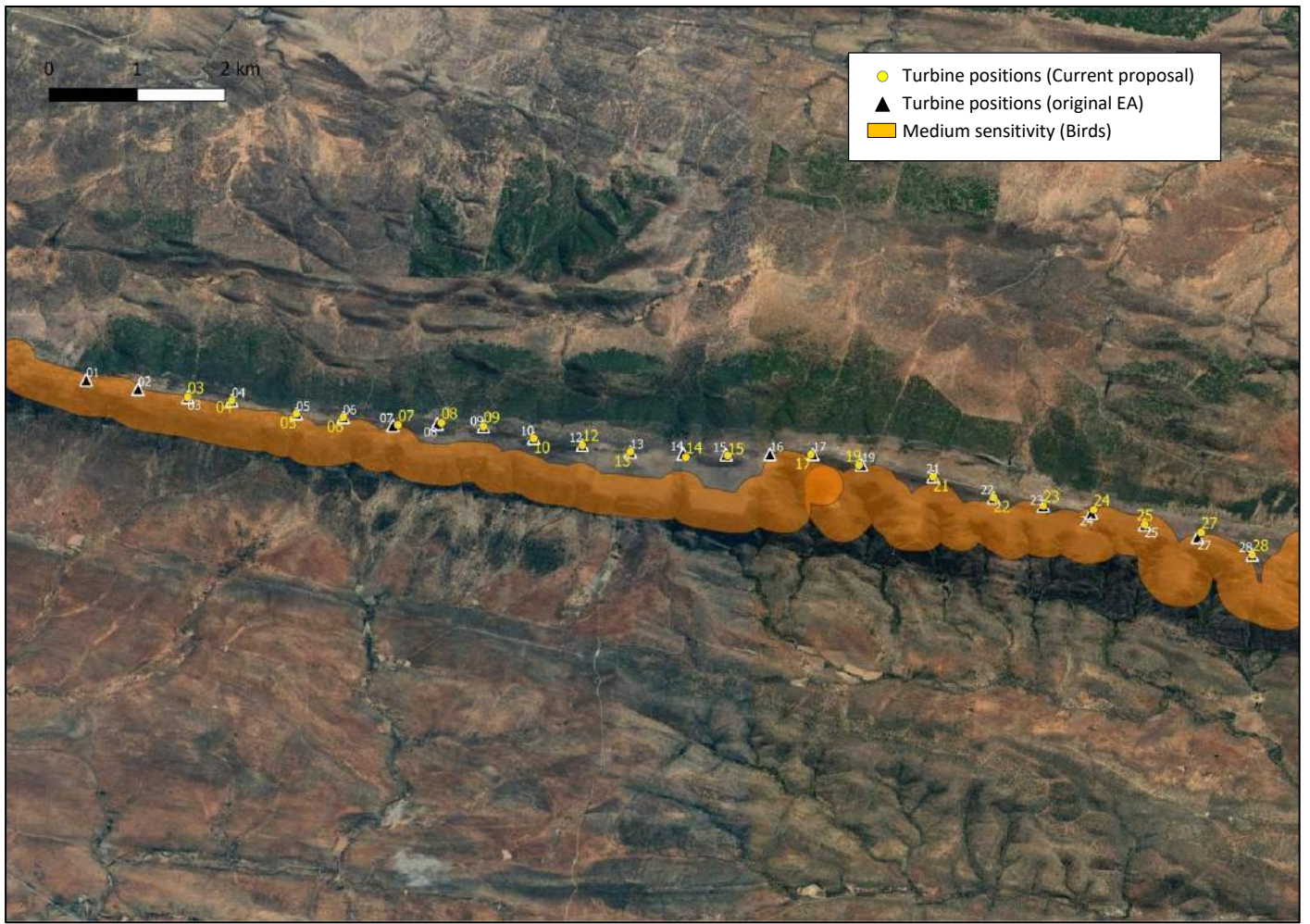


Figure 6-1. Original and new layouts overlaid on the avifaunal sensitivity map.

## 7. EFFECT OF CHANGES ON IMPACT SIGNIFICANCE RATINGS

The original impact assessment ratings were presented in Section 2. These are repeated below in Table 5, with our new assessment in the far-right hand column (Appendix 1 shows impact assessment criteria). It was found that the current amendments did not change any of the previous significance ratings of the original assessment.

Table 5. Comparative impact significance ratings.

Impact	Original Assessment (Smallie, 2014)	Amendment II – May 2018	Current Amendment – October 2019
Habitat destruction	MEDIUM	Unchanged by proposed amendment	Unchanged by proposed amendment
Disturbance of birds	LOW	Unchanged by proposed amendment	Unchanged by proposed amendment
Displacement of birds	LOW	Unchanged by proposed amendment	Unchanged by proposed amendment
Collision of birds with turbine blades	MEDIUM	Unchanged by proposed amendment	Unchanged by proposed amendment
Collision and electrocution of birds with and on the grid connection power line	HIGH	Unchanged by proposed amendment.	Unchanged by proposed amendment.

## 8. CONCLUSION & RECOMMENDATIONS

Our findings are as follows:

- » The significance of all rated impacts remains unchanged for all assessed impacts, including bird collision risk which remains as Medium (-)
- » We confirm that the revised layout does not significantly impinge the previously identified sensitive areas on site. Two turbines are slightly within the Medium sensitivity area but are for practical intents and purposes, within acceptable tolerances.
- » Recommended mitigation measures include:
  - No turbines, other than numbers 24 and 25, should impinge the MEDIUM sensitivity areas identified by this study. Where necessary this can be discussed further with the specialist and agreement reached.
  - All electrical cables between turbines and linking turbine to the on-site substation should be placed underground.
  - The power line linking the site to the Eskom grid will be above ground by necessity. The line will need to conform to all Eskom standards in terms of bird friendly pole monopole structures with Bird Perches on every pole top (to mitigate for bird electrocution), and anti-bird collision line marking devices (to mitigate for bird collision) on the earth wires of high risk sections. These sections must be identified by a suitably qualified avifaunal specialist once the final route for the line is determined. It is particularly important that the collision mitigation devices used are durable and remain in place on the line for the full lifespan of the power line. Devices must alternate between light and dark colours (to provide contrast with dark and light backgrounds), and must be installed on the full length of each span, not only the middle two-thirds as previously believed. It will be Eskom and/or Wolf WEF's responsibility to maintain these devices in effective condition for this period. Systematic patrols of this power line should be conducted during post construction bird monitoring for the wind energy facility, in order to monitor the impacts, the effectiveness of mitigation, and the durability of the mitigation measures.
  - A final avifaunal walk through should be conducted prior to construction to ensure that all the above aspects have been adequately managed and to ground truth the final layout of all infrastructure. This will most likely be done as part of the site specific Environmental Management Plan. This will also allow the development of specific management actions for the Environmental Control Officer during construction, and training for relevant on site personnel if necessary.
  - The post-construction bird monitoring programme outlined by this report should be implemented by a suitably qualified and accredited avifaunal specialist. Post construction monitoring of live bird abundance and movement should be conducted for at least 1 year and carcass searches for at least 2 -3 years and repeated every 5 years thereafter. This monitoring should be done in accordance with the latest version of the best practice guidelines available at the time (Jenkins et al, 2012). This monitoring should include the grid connection power line.
  - The findings of post-construction monitoring should be used to measure the effects of this facility on birds. If significant impacts are identified the wind farm operator will have to identify and implement suitable mitigation measures.
  - At other operational wind farms it has been suspected that ground burrowing small mammals such as Ground Squirrel found more favourable burrowing conditions along new road and hard stand verges on site after construction, which resulted in an inflated prey base for eagles close to turbines, and consequent higher turbine collision risk. Also – rock piles left after civil works are believed in some cases to have provided habitat for rock hyrax (dassie) close to turbines, thereby increasing collision risk for raptors. It is essential that the Wolf Wind Farm does not create favourable conditions for such mammals in high risk areas. We recommend

that no rock piles be allowed to remain on the site and that all road verges, drains, and other impacted areas be sufficiently compacted to ensure that ground burrowing animals do not colonise these areas. We recommend that an avifaunal specialist conduct an inspection of these aspects at a suitable stage during construction and at the outset of operational phase bird monitoring, and that any concerns are identified and addressed timeously by the wind farm.

- Given that the impact of bird collision with turbines could occur once the wind farm is operational and require mitigation, we recommend strongly that an appropriate mitigation budget be provided for by the developer. At this stage it is not possible to determine what mitigation may be appropriate, and in the time between writing this report and the mitigation need arising (likely several years) new mitigation methods may be developed. However if such a need arises and suitable mitigation is identified it cannot be argued by the wind farm operator that mitigation was not budgeted for. Mitigation could cost the operator either in the form of additional costs or lost productivity as a result of changes to turbine operations. It is also important that the developer be aware that mitigation measures may require the installation of equipment on turbines, or possibly the painting of blades. Potential technical and warranty challenges should be noted throughout the planning process so that they do not prevent the implementation of mitigation if required.
- Any significant impacts detected by the operational phase bird monitoring must be mitigated where judged necessary by the avifaunal specialist. The onus is on the wind farm operator to have planned ahead for such an eventuality, particularly in respect of financial budgeting. We recommend that within the first six months of operations the site develop a 'mitigation policy' document which identifies relevant species, outlines fatality or flight activity thresholds to trigger mitigation, and potential mitigation measures.

## 9. REFERENCES

- » BirdLife South Africa. 2018. Cape Vulture and Wind Farms: Guidelines for impact assessment, monitoring and mitigation. August 2018. Compiled by Dr Morgan Pfeiffer and Samantha Ralston-Paton
- » Smallie, 2014. Wolf Wind Energy Facility – Avifaunal Impact Assessment. Unpublished report submitted to Aurecon.
- » Jenkins, A.R., Van Rooyen, C.S., Smallie, J., Harrison, J.A., Diamond, M., Smit-Robbinson, H.A. & Ralston, S. 2015. “Best practice guidelines for assessing and monitoring the impact of wind energy facilities on birds in southern Africa” Unpublished guidelines
- » Ralston-Paton, S., Smallie, J., Pearson, A., & Ramalho, R. 2017. Wind energy’s impacts on birds in South Africa: a preliminary review of the results of operational monitoring at the first wind farms of the Renewable Energy Independent Power Producer Procurement Programme Wind Farms in South Africa. BirdLife South Africa Occasional Report Series No. 2. BirdLife South Africa, Johannesburg, South Africa.

## APPENDIX 1. IMPACT ASSESSMENT METHODOLOGY (AURECON)

This section outlines the proposed method for assessing the significance of the potential environmental impacts outlined above. As indicated, these include both operational and construction phase impacts.

For each impact, the EXTENT (spatial scale), MAGNITUDE and DURATION (time scale) would be described. These criteria would be used to ascertain the SIGNIFICANCE of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The mitigation described in the EIAR would represent the full range of plausible and pragmatic measures but does not necessarily imply that they would be implemented.

The tables on the following pages show the scale used to assess these variables, and defines each of the rating categories.

Table 1: Assessment criteria for the evaluation of impacts

CRITERIA	CATEGORY	DESCRIPTION
Extent or spatial influence of impact	Regional	Beyond a 10 km radius of the candidate site.
	Local	Within a 10 km radius of the candidate site.
	Site specific	On site or within 100 m of the candidate site.
Magnitude of impact (at the indicated spatial scale)	High	Natural and/ or social functions and/ or processes are <i>severely</i> altered
	Medium	Natural and/ or social functions and/ or processes are <i>notably</i> altered
	Low	Natural and/ or social functions and/ or processes are <i>slightly</i> altered
	Very Low	Natural and/ or social functions and/ or processes are <i>negligibly</i> altered
	Zero	Natural and/ or social functions and/ or processes remain <i>unaltered</i>
Duration of impact	Construction period	Up to 3 years
	Short Term	Up to 5 years after construction
	Medium Term	5-15 years after construction
	Long Term	More than 15 years after construction

The SIGNIFICANCE of an impact is derived by taking into account the temporal and spatial scales and magnitude. The means of arriving at the different significance ratings is explained in **Table 2**.

Table 2: Definition of significance ratings

SIGNIFICANCE RATINGS	LEVEL OF CRITERIA REQUIRED
<b>High</b>	<ul style="list-style-type: none"> <li>High magnitude with a regional extent and long term duration</li> <li>High magnitude with either a regional extent and medium term duration or a local extent and long term duration</li> <li>Medium magnitude with a regional extent and long term duration</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>High magnitude with a local extent and medium term duration</li> <li>High magnitude with a regional extent and construction period or a site specific extent and long term duration</li> <li>High magnitude with either a local extent and construction period duration or a site specific extent and medium term duration</li> <li>Medium magnitude with any combination of extent and duration except site specific and construction period or regional and long term</li> <li>Low magnitude with a regional extent and long term duration</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>High magnitude with a site specific extent and construction period duration</li> <li>Medium magnitude with a site specific extent and construction period duration</li> <li>Low magnitude with any combination of extent and duration except site specific and construction period or regional and long term</li> <li>Very low magnitude with a regional extent and long term duration</li> </ul>
<b>Very low</b>	<ul style="list-style-type: none"> <li>Low magnitude with a site specific extent and construction period duration</li> <li>Very low magnitude with any combination of extent and duration except regional and long term</li> </ul>
<b>Neutral</b>	<ul style="list-style-type: none"> <li>Zero magnitude with any combination of extent and duration</li> </ul>

Once the significance of an impact has been determined, the PROBABILITY of this impact occurring as well as the CONFIDENCE in the assessment of the impact, would be determined using the rating systems outlined in **Table 3** and



Table 4 respectively. It is important to note that the significance of an impact should always be considered in concert with the probability of that impact occurring. Lastly, the REVERSIBILITY of the impact is estimated using the rating system outlined in Table 5.

Table 3: Definition of probability ratings

<b>PROBABILITY RATINGS</b>	<b>CRITERIA</b>
<b>Definite</b>	Estimated greater than 95 % chance of the impact occurring.
<b>Probable</b>	Estimated 5 to 95 % chance of the impact occurring.
<b>Unlikely</b>	Estimated less than 5 % chance of the impact occurring.

Table 4: Definition of confidence ratings

<b>CONFIDENCE RATINGS</b>	
<b>RATINGS</b>	<b>CRITERIA</b>
<b>Certain</b>	Wealth of information on and sound understanding of the environmental factors potentially influencing the impact.
<b>Sure</b>	Reasonable amount of useful information on and relatively sound understanding of the environmental factors potentially influencing the impact.
<b>Unsure</b>	Limited useful information on and understanding of the environmental factors potentially influencing this impact.

Table 5: Definition of reversibility ratings

<b>REVERSIBILITY RATINGS</b>	<b>CRITERIA</b>
<b>Irreversible</b>	The activity will lead to an impact that is in all practical terms permanent.
<b>Reversible</b>	The impact is reversible within 2 years after the cause or stress is removed.



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

### DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:  
NEAS Reference Number:  
Date Received:

(For official use only)

DEA/EIA/

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

#### PROJECT TITLE

**Proposed Wind Energy Facility and Associated Infrastructure on Wolf Wind Farm (Pty) Ltd, near Wolwefontein in the Eastern Cape**

#### Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

#### Departmental Details

##### Postal address:

Department of Environmental Affairs  
Attention: Chief Director: Integrated Environmental Authorisations  
Private Bag X447  
Pretoria  
0001

##### Physical address:

Department of Environmental Affairs  
Attention: Chief Director: Integrated Environmental Authorisations  
Environment House  
473 Steve Biko Road  
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:  
Email: [EIAAdmin@environment.gov.za](mailto:EIAAdmin@environment.gov.za)

**1. SPECIALIST INFORMATION**

Specialist Company Name: B-BBEE	WILDSKIES ECOLOGICAL SERVICES		
Specialist name:	Contribution level (indicate 1 to 8 or non-compliant)	Percentage Procurement recognition	
Specialist Qualifications:	4	100	
Professional affiliation/registration:	I. SMALLIE		
Physical address:	SACNASP		
Postal address:	BSC MSC		
Postal code:	30 UTRECHT AVE EAST LONDON		
Telephone:	Cell:	0824448919	
E-mail:	Fax:		
	jon@wildskies.co.za		

**2. DECLARATION BY THE SPECIALIST**

I, I. SMALLIE, declare that -

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

*[Handwritten Signature]*

Signature of the Specialist

WILDSKIES ECOLOGICAL SERVICES  
Name of Company:

20/1/2020  
Date

**3. UNDERTAKING UNDER OATH/ AFFIRMATION**

I, I. SMALLIE, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

*[Handwritten Signature]*

Signature of the Specialist

WILDSKIES ECOLOGICAL SERVICES  
Name of Company

20/1/2020  
Date

*[Handwritten Signature]*

Signature of the Commissioner of Oaths

20/01/2020  
Date



**KIM SMALLIE**  
Commissioner of Oaths  
HR Professional (HRP)  
Member number: G404  
3 Pearce Street  
Berea, East London  
5201

# ANNEXURE D

## PUBLIC PARTICIPATION PROCESS

# ANNEXURE D.1

List of Interested and Affected Parties

## I&amp;AP REGISTER (2020-02-27)

## Landowners for Wind Farm and Transmission line

SG21 digit code	Farm Name	Landowners
C0760000000066900001	Blaauwbosch Kuil	Andre van Logrenberg (Manager) Ali (Owner)
C0760000000006000001	Cauchafskie	Daniel Jacobus Diedericks aka "Dick Diedericks"
C0350000000029600001	Dassiekloof Annex	Henry and Dudley Viljoen
C076000000006690000C	Ex Blaauwbosch Kuil	Schalk vd Merwe
C076000000000150000C	Hartebeestefontein	Christie Beets
C076000000000150000C	Hartebeestefontein	Johan Rust
C0760000000028700001	Mon Desir (Salt pan's neck)	John Skinner
C0760000000001200001	Otjes Kraal	Schalk v/d Merwe
C076000000006680000C	Ouplaas Poort	Schalk vd Merwe
C035000000002850000C	Paardeberg North	Cem Kumral
C0350000000028500001	Paardeberg North	Johan van Tonder
C035000000003040000C	Paardeberg North	Cem Kumral
C0350000000028500002	Paardeberg North (Jackals Vlei)	Jan Visser
C035000000002860000C	Paardeberg South	John Skinner
C0350000000028600001	Paardeberg South	Henry and Dudley Viljoen
C0350000000028600002	Paardeberg South	John Skinner
C0350000000028600003	Paardeberg South	John Skinner
C0350000000028600004	Paardeberg South	John Skinner
C035000000002860000E	Paardeberg South	Louw Botes
C035000000002870000C	Salt pan's neck	Johan van Tonder
C0350000000028700002	Salt pan's neck	Vivian Skinner
C0350000000028700003	Salt pan's neck	Mike Meiring
C0760000000001200003	Vaalefontein	Daniel Jacobus Diedericks aka "Dick Diedericks"
C0760000000001200004	Vaalefontein	John Skinner
C076000000000120000E	Vaalefontein	John Skinner
C076000000000120001C	Vaalefontein	John Skinner
C0760000000001200011	Vaalefontein	Daniel Jacobus Diedericks aka "Dick Diedericks"

Authority and interest groups

Body	Contact
Birdlife South Africa	Mark Anderson
Birdlife South Africa	Samanatha Ralston
CAA	Lizell Stroh
Cacadu District Municipality	Aretha Plata (Environmental Health)
DAFF: Land Use & Soil Management	Mashubu Marubini
Department of Energy Eastern Cape	The Director: Eastern Cape
Department of Environmental Affairs	Ishaam Abader
Department of Transport - Eastern Cape	Mr Linda Sali
Department of Water Affairs (DWA): Eastern Cape	Ms P Makhanya
Dr Beyer's Naude Municipality	Daniel J Bezuidenhoudt (Ward 12)
Dr Beyer's Naude Municipality - Municipal Manager	Municipal Manager
Eastern Cape Department of Agriculture and Land Affairs	Mr Lumkile Ngada
Eastern Cape Department of Economic Development, Environmental Affairs and Tourism	Gerry Pienaar (Senior Manager: Renewable Energy)
Eastern Cape Department of Rural development and land reform	Mr Kholekile Sonjica (Communication Officer: Eastern Cape)
Eastern Cape Provincial Heritage Resources Authority (ECPHRA)	Mr ML Zote
Eskom Land Development	John Geeringh (Pr Sci Nat)
EWT-Wildlife Energy Interaction Group (WEIG)	Luke Strugnell
Ikwezi Local Municipality	The Municipal Manager (Mr Thembanani Gutas)
SAHRA	Dr Mariagrazia Galimberti
SAHRA	Katie Smuts
SANRAL	Ms René de Kock
SANRAL	Ms Nicole Abrahams
SENTECH	Mr Johan Koegelenberg
South African National Parks: General Manager, Park Planning and Development	Dr Michael Knight
Sundays River Local Municipality	AM Ndawo (Ward 7)
Sundays River Municipality - Municipal Manager	Municipal Manager
Sundays River Valley Local Municipality	The Municipal Manager (Mr Lonwabo Ngoqo)
WESSA Eastern Cape: PE	Prof. Martheanne Finnemore

## Registered I&amp;APS

	Body / organisation	Contact
		Blue Age Prop 21 Pty Ltd
		Chanelle Sampson
		Dassiekloof Boerdery cc (Dudley Viljoen)
	Hartebeefontein Farm	Jo Beets
		Johan Rust
		Johan van Tonder
		John Skinner
		Karen de Bruyn
		Koffylaagte Game Lodge cc
		Louw Botes
	Wolwefontein Hotel	Marius Herselman
		Meiring Hunting and Trading cc
		ML Zote
		Ou Plaas Poort Trust
	Kleinpoort Farm / Village	Patrick Grewar
		Poza Real Estate Pty Ltd
	Cockscomb Landbou Vereniging	Schalk Nel
		Schalk Nel
		Stephanus Skeepers
	Pinelands Farm	Victor Watson
	Kleinpoort Boeresake	Wilem Kloppers



# ANNEXURE D.2

I&AP comment period notification letter

27 February 2020

**AMENDMENT OF ENVIRONMENTAL AUTHORISATION FOR THE WOLF WIND FARM (PTY) LTD, NEAR WOLWEFONTEIN IN THE EASTERN CAPE DEA REF. NO. 14/12/16/3/3/2/599/AM5**

Dear Authorities and Interested and Affected Parties,

Wolf Wind Farm (Pty) Ltd, a subsidiary to juwi Renewable Energies (Pty) Ltd, has been authorised (Environmental Authorisation (EA) ref no. 14/12/16/3/3/1/599, as amended) to construct a 90MW Wolf Wind Farm and associated infrastructure, approximately 5km north of Wolwefontein, 35km north-west of Kirkwood and 36km south-east of Jansenville on the Klein Winterhoek Mountains in the Eastern Cape, which falls within both the Ikwezi Local Municipality and Sundays River Local Municipality.

The following activities are approved: GN 544: activities 10, 11, 18 and 22; GN 545: activity 1 and 15; and GN 546: activities 4, 12, 13, 14, 16 and 19 of GN No. 546 published in terms of National Environment Management Act (NEMA) (No. 107 of 1998). The Wind farm and associated powerline affects the following farms.

Farm/Plaas	9	12	15	60
Portion (s)/Gedeelte (s)	0	1, 3, 4, 11	0, 2	1

Following previous amendments to allow for larger turbines, the applicant would again like to amend the EA to allow for even larger, newer wind turbines that are likely to be available at the time the project is implemented, which may better serve the project. The proposed amendment involves:

- 1. Tower height:** Increase turbine tower height from  $\leq 110\text{m}$  to  $\leq 135\text{m}$
- 2. Rotor diameter:** Increase max Rotor diameter from  $\leq 160\text{m}$  to  $\leq 186\text{m}$
- 3. Turbine numbers:** Decrease turbine positions from  $\leq 24$  to  $\leq 21$  (dropping turbines No. 1, 2 and 16)
- 4. Layout revision:** Micrositing of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).
- 5. Update of Applicant address** – The applicant has moved offices and these details will be amended.
- 6. Update Condition 13.17:** Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the details of the current amendment

**WYSIGING VAN DIE OMGEWINGS MAGTIGING VIR DIE WOLF WINDPLAAS (EDMS) BPK, NABY WOLWEFONTEIN IN DIE OOS-KAAP DOS VERW. NR. 14/12/16/3/3/2/599/AM5**

Geagte Owerhede en Belanghebbende en/of Geaffekteerde Partye,

Wolf Windplaas (Edms) Bpk, 'n filiaal van juwi Hernubare Energie (Edms) Bpk, is gemagtig (Omgewingsmagtiging (OM) Verw. Nr. 14/12/16/3/3/1/599, soos gewysig) om 'n 90MW Wolf Windplaas en gepaardgaande infrastruktuur op te rig, ongeveer 5km noord van Wolwefontein, 35km noord-wes van Kirkwood en 36km suid-oos van Jansenville op die Klein Winterhoekberge in die Oos-Kaap, wat in beide die Ikwezi Plaaslike Munisipaliteit en Sondagsrivier Plaaslike Munisipaliteit val.

Die volgende aktiwiteite is goedgekeur GN 544: aktiwiteite 10, 11, 18 en 22; GN 545: aktiwiteite 1 en 15; en GN 546: aktiwiteite 4, 12, 13, 14, 16 en 19 van GN. Nr. 546 gepubliseer ingevolge die Nasionale Omgewingsbestuurswet (NEMA) (Nr. 107 van 1998). Die Windplaas en verwante kraglyn beïnvloed die volgende plase:

	285	286	287	291	304	668	669
Portion (s)/Gedeelte (s)	0, 1, 2	0, 1, 2, 3, 5	0, 1, 2	0	-	0	0, 1

Na vorige wysigings om nuwer wind turbines toe te laat, wil die aansoeker die OM wysig om nog groter, nuwer wind turbines wat moontlik beskikbaar sal wees met die implementering van die projek en wat die projek beter kan dien. Die voorgestelde wysiging behels:

- 1. Toringhoogte:** Verhoog toringhoogte van turbine van  $\leq 110\text{m}$  tot  $\leq 135\text{m}$
- 2. Rotor deursnee:** Verhoog maksimum rotor deursnee van  $\leq 160\text{m}$  tot  $\leq 186\text{m}$
- 3. Turbine nommers:** Verminder turbine posisies van  $\leq 24$  na  $\leq 21$  (laat turbines Nr. 1, 2 en 16 uit)
- 4. Uitleg hersiening:** Mikro-plasing van 8 turbineposisies om hersiene / uitgebreide vlêrmuisbuffersveranderinge (sien turbines 7, 8, 14, 15, 17, 19, 24 en 27) in die ligging en grootte van die turbine te vermy, het 'n geringe hersiening van die ontwerpuitleg vir gepaardgaande infrastruktuur uitgelok (insluitend paaie (breër draaie, hersiene vragmotor-draaiareas), kables, tydelike afsettingsareas en die substasie).
- 5. Opdatering van Aansoeker se adres:** Die Aansoeker het na ander kantore geskuif. Hierdie besonderhede sal gewysig word.
- 6. Opdatering van Voorwaarde 13.17:** Voorwaarde 13.17 moet die verwysing na die gewysigde OIV van 26 June 2016 verwyder en dit vervang met die besonderhede van die huidige wysiging.

This amendment changes the scope of the EA and, in terms of Government Notice Regulation 982 of 4 December 2014 (GN R.982) may change the nature or scope of the associated impacts, and thus a Part 2 EA amendment process has been prescribed in accordance with Section 32 of GN R.982.

The draft EA amendment report reviews impacts associated specifically with Bats, Birds, Noise, and Visual and concluded that the proposed amendment would not result in any new impacts or change the impact profile of the project as compared to that already authorised. No new activities are triggered as a result of the amendment. Subject to any objections or issues raised by the public, and assuming the proper implementation of the original EMP, the EAP finds no reason to not allow for the amendment of the EA.

The Draft Amendment report will be available from 27 February 2020 at the Kirkwood Library (Middle Street) and Jansenville Library (Church Square) for viewing or download here: <https://tinyurl.com/ryyckyg>. A copy of the report can be emailed on request to the undersigned.

Please send any comments or queries regarding the proposed amendment or the amendment report, in writing to Patrick Killick (Aurecon) by 30 March 2020. Should you not have any comments, kindly confirm this by sending a notification of no comment.

**Please direct any comments by 30 March 2020 in writing to:**

Patrick Killick

Email: [patrick.killick@aurecongroup.com](mailto:patrick.killick@aurecongroup.com)

Post: PO Box 509, George, 6530

Fax: 044 805 5454

Should you have any queries with regard to these applications for EA amendment, please do not hesitate to contact the undersigned.

Yours sincerely,

**Patrick Killick**

Senior Environmental Assessment Practitioner Tel: 044 805 5432

Hierdie wysiging lei tot 'n verandering in die omvang van die OM, en in terme van Goewermenskennisgewing Regulasie 982 van 4 Desember 2014 (GK R.982) kan dit lei tot 'n verandering aan die aard of omvang van die gepaardgaande impakte, en dus is 'n Deel 2 OM wysigings proses voorgeskryf in ooreenstemming met Artikel 32 van GK R.982.

Die konsep-OM-wysigingsverslag beoordeel die gevolge wat spesifiek met vlêrmuise, voëls, geraas en visuele verband hou, en het tot die gevolgtrekking gekom dat die voorgestelde wysiging geen nuwe impakte tot gevolg sou hê of die impakprofiel van die projek sal verander in vergelyking met dit wat reeds goedgekeur is nie. Geen nuwe aktiwiteite word veroorsaak as gevolg van die wysiging nie. Onderworpe aan enige besware of kwessies wat deur die publiek geopper word, en met die veronderstelling dat die oorspronklike Omgewingsbestuursplan behoorlik geïmplementeer word, vind die OAP geen rede om nie die OM te wysig nie

Die Konsep Wysigings verslag sal beskikbaar wees vanaf 27 Februarie 2020 by die Kirkwood Biblioteek (Middelstraat) en Jansenville Biblioteek (Kerkplein) vir besigtiging of aflaai hier: <https://tinyurl.com/ryyckyg>. 'n Kopie van die verslag kan ge-epos word op versoek aan die ondergetekende.

Stuur asseblief u naam en kontakbesonderhede met enige kommentaar of navrae wat u mag hê met betrekking tot die voorgestelde wysiging of die wysigings verslag, skriftelik aan Patrick Killick (Aurecon) teen 30 Maart 2020. Indien u geen kommentaar het nie, bevestig dit asseblief deur 'n kennisgewing van geen kommentaar deur te stuur.

**Rig asseblief enige kommentaar teen 30 Maart 2020 op skrif aan:**

Patrick Killick

E-pos: [patrick.killick@aurecongroup.com](mailto:patrick.killick@aurecongroup.com)

Pos: Posbus 509, George, 6530

Faks: 044 805 5454

Indien u enige navrae met betrekking tot hierdie aansoek vir OM wysiging het, moet asseblief nie huiwer om die ondergetekende te kontak nie.

Die uwe,

# ANNEXURE D.3

Comments and responses report

Will be provided as part of final EA Report

# ANNEXURE E

## PPP PROOFS REQUIRED BY CA

Will be provided as part of final EA Report

# ANNEXURE E.1

**Proof of advertisements and site sign boards**

Will be provided as part of final EA Report



# NOTICE: WOLF WIND FARM



## PUBLIC PARTICIPATION PROCESS / PUBLIKE DEELNAME PROSES:

**AMENDMENT OF ENVIRONMENTAL AUTHORISATION FOR THE WOLF WIND FARM (PTY) LTD, NEAR WOLWEFONTEIN IN THE EASTERN CAPE DEA REF. NO. 14/12/16/3/3/2/599/AM5**

**WYSIGING VAN DIE OMGEWINGS MAGTIGING VIR DIE WOLF WINDPLAAS (EDMS) BPK, NABY WOLWEFONTEIN IN DIE OOS-KAAP DOS VERW. NR. 14/12/16/3/3/2/599/AM5**

Wolf Wind Farm (Pty) Ltd, a subsidiary to juwi Renewable Energies (Pty) Ltd, has been authorised (Environmental Authorisation (EA) ref no. 14/12/16/3/3/1/599, as amended) to construct a 90MW Wolf Wind Farm and associated infrastructure, approximately 5km north of Wolwefontein, 35km north-west of Kirkwood and 36km south-east of Jansenville on the Klein Winterhoek Mountains in the Eastern Cape, which falls within both the Ikwezi Local Municipality and Sundays River Local Municipality.

Wolf Windplaas (Edms) Bpk, 'n filiaal van juwi Hernubare Energie (Edms) Bpk, is gemagtig (Omgewingsmagtiging (OM) Verw. Nr. 14/12/16/3/3/1/599, soos gewysig) om 'n 90MW Wolf Windplaas en gepaardgaande infrastruktuur op te rig, ongeveer 5km noord van Wolwefontein, 35km noord-wes van Kirkwood en 36km suid-oos van Jansenville op die Klein Winterhoekberge in die Oos-Kaap, wat in beide die Ikwezi Plaaslike Munisipaliteit en Sondagsrivier Plaaslike Munisipaliteit val.

Farm	9	12	15	60	285	286	287	291	304	668	669
Portion (s)	0	1, 3, 4, 11	0, 2	1	0, 1, 2	0, 1, 2, 3, 5	0, 1, 2	0	-	0	0, 1

Following previous amendments to allow for larger turbines, the applicant would again like to amend the EA to allow for even larger, newer wind turbines that are likely to be available at the time the project is implemented, which may better serve the project. The proposed amendment involves:

Na vorige wysigings om nuwer wind turbines toe te laat, wil die aansoeker die OM wysig om nog groter, nuwer wind turbines wat moontlik beskikbaar sal wees met die implementering van die projek en wat die projek beter kan dien. Die voorgestelde wysiging behels:

- 1. Tower height:** Increase turbine tower height from  $\leq 110m$  to  $\leq 135m$
- 2. Rotor diameter:** Increase max Rotor diameter from  $\leq 160m$  to  $\leq 186m$
- 3. Turbine numbers:** Decrease turbine positions from  $\leq 24$  to  $\leq 21$  (dropping turbines No. 1, 2 and 16)
- 4. Layout revision:** Micrositing of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).
- 5. Update of Applicant address** – The applicant has moved offices and these details will be amended.
- 6. Update Condition 13.17:** Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the details of the current amendment

- 1. Toringhoogte:** Verhoog tooringhoogte van turbine van  $\leq 110m$  tot  $\leq 135m$
- 2. Rotor deursnee:** Verhoog maksimum rotor deursnee van  $\leq 160m$  tot  $\leq 186m$
- 3. Turbine nommers:** Verminder turbine posisies van  $\leq 24$  na  $\leq 21$  (laat turbines Nr. 1, 2 en 16 uit)
- 4. Uitleg hersiening:** Mikro-plasing van 8 turbineposisies om hersiene / uitgebreide vlêrmuisbuffersveranderinge (sien turbines 7, 8, 14, 15, 17, 19, 24 en 27) in die ligging en grootte van die turbine te vermy, het 'n geringe hersiening van die ontwerpuitleg vir gepaardgaande infrastruktuur uitgelok (insluitend paaie (breër draaie, hersiene vragmotor-draaiareas), kables, tydelike afsettingsareas en die substasie).
- 5. Opdatering van Aansoeker se adres:** Die Aansoeker het na ander kantore geskuif. Hierdie besonderhede sal gewysig word.
- 6. Opdatering van Voorwaarde 13.17:** Voorwaarde 13.17 moet die verwysing na die gewysigde OIV van 26 June 2016 verwyder en dit vervang met die besonderhede van die huidige wysiging.

This amendment changes the scope of the EA and, in terms of Government Notice Regulation 982 of 4 December 2014 (GN R.982) may change the nature or scope of the associated impacts, and thus a Part 2 EA amendment process has been prescribed in accordance with Section 32 of GN R.982.

Hierdie wysiging lei tot 'n verandering in die omvang van die OM, en in terme van Goewermentskennisgewing Regulasie 982 van 4 Desember 2014 (GK R.982) kan dit lei tot 'n verandering aan die aard of omvang van die gepaardgaande impakte, en dus is 'n Deel 2 OM wysigings proses voorgeskryf in ooreenstemming met Artikel 32 van GK R.982.

**The following activities are approved: GN 544: activities 10, 11, 18 and 22; GN 545: activity 1 and 15; and GN 546: activities 4, 12, 13, 14, 16 and 19 of GN No. 546 published in terms of National Environment Management Act (NEMA) (No. 107 of 1998). No new activities are triggered as a result of the amendment.**

**Die volgende aktiwiteite is goedgekeur GN 544: aktiwiteite 10, 11, 18 en 22; GN 545: aktiwiteite 1 en 15; en GN 546: aktiwiteite 4, 12, 13, 14, 16 en 19 van GN. Nr. 546 gepubliseer ingevolge die Nasionale Omgewingsbestuurswet (NEMA) (Nr. 107 van 1998). Geen nuwe aktiwiteite word veroorsaak as gevolg van die wysiging nie.**

The Draft Amendment report will be available from 27 February 2020 at the Kirkwood Library (Middle Street) and Jansenville Library (Church Square) for viewing or download here: <https://tinyurl.com/ryyckyg>.

Die Konsep Wysigings verslag sal beskikbaar wees vanaf 27 Februarie 2020 by die Kirkwood Biblioteek (Middelstraat) en Jansenville Biblioteek (Kerkplein) vir besigtiging of aflaai hier: <https://tinyurl.com/ryyckyg>.

A copy of the report can be emailed on request to the undersigned.

'n Kopie van die verslag kan ge-epos word op versoek aan die ondergetekende.

If you would like to register as an interested and/ or affected party (I&AP), please send your name and contact details along with any comments or queries you may have, regarding the proposed amendment or the amendment report, in writing to Patrick Killick (Aurecon) by 30 March 2020:

As u wil registreer as 'n belanghebbende en/of geaffekteerde party (B&GP), stuur asseblief u naam en kontakbesonderhede met enige kommentaar of navrae wat u mag hê met betrekking tot die voorgestelde wysiging of die wyigings verslag, skriftelik aan Patrick Killick (Aurecon) teen 30 March 2020:

Tel: (044) 805 5432

E-mail / E-pos:

Patrick.killick@aurecongroup.com

Fax / Faks: (044) 805 5454

Postal address / Posadres:

PO Box 509, George, 6530

# PUBLIC PARTICIPATION PROCESS / PUBLIKE DEELNAME PROSES:



**AMENDMENT OF ENVIRONMENTAL AUTHORISATION FOR THE WOLF WIND FARM (PTY) LTD, NEAR WOLWEFONTEIN IN THE EASTERN CAPE DEA REF. NO. 14/12/16/3/3/2/599/AM5**

**WYSIGING VAN DIE OMGEWINGS MAGTIGING VIR DIE WOLF WINDPLAAS (EDMS) BPK, NABY WOLWEFONTEIN IN DIE OOS-KAAP DOS VERW. NR. 14/12/16/3/3/2/599/AM5**

Wolf Wind Farm (Pty) Ltd, a subsidiary to juwi Renewable Energies (Pty) Ltd, has been authorised (Environmental Authorisation (EA) ref no. 14/12/16/3/3/1/599, as amended) to construct a 90MW Wolf Wind Farm and associated infrastructure, approximately 5km north of Wolwefontein, 35km north-west of Kirkwood and 36km south-east of Jansenville on the Klein Winterhoek Mountains in the Eastern Cape, which falls within both the Ikwezi Local Municipality and Sundays River Local Municipality.

Wolf Windplaas (Edms) Bpk, 'n filiaal van juwi Hernubare Energie (Edms) Bpk, is gemagtig (Omgewingsmagtiging (OM) Verw. Nr. 14/12/16/3/3/1/599, soos gewysig) om 'n 90MW Wolf Windplaas en gepaardgaande infrastruktuur op te rig, ongeveer 5km noord van Wolwefontein, 35km noord-wes van Kirkwood en 36km suid-oos van Jansenville op die Klein Winterhoekberge in die Oos-Kaap, wat in beide die Ikwezi Plaaslike Munisipaliteit en Sondagsrivier Plaaslike Munisipaliteit val.

<b>Farm</b>	<b>9</b>	<b>12</b>	<b>15</b>	<b>60</b>	<b>285</b>	<b>286</b>	<b>287</b>	<b>291</b>	<b>304</b>	<b>668</b>	<b>669</b>
<b>Portion (s)</b>	0	1, 3, 4, 11	0, 2	1	0, 1, 2	0, 1, 2, 3, 5	0, 1, 2	0	-	0	0, 1

Following previous amendments to allow for larger turbines, the applicant would again like to amend the EA to allow for even larger, newer wind turbines that are likely to be available at the time the project is implemented, which may better serve the project. The proposed amendment involves:

- 1. Tower height:** Increase turbine tower height from  $\leq 110m$  to  $\leq 135m$
- 2. Rotor diameter:** Increase max Rotor diameter from  $\leq 160m$  to  $\leq 186m$
- 3. Turbine numbers:** Decrease turbine positions from  $\leq 24$  to  $\leq 21$  (dropping turbines No. 1, 2 and 16)
- 4. Layout revision:** Micrositing of 8 turbine positions to avoid revised/expanded bat buffers (See turbines 7, 8, 14, 15, 17, 19, 24 and 27) changes in turbine location and size precipitated the need for a minor revisions to the draft layout for associated infrastructure (including roads (wider bends, revised truck turning areas), cabling, temporary laydown areas and the substation).
- 5. Update of Applicant address** – The applicant has moved offices and these details will be amended.
- 6. Update Condition 13.17:** Condition 13.17 should remove the referral to the amended EIR dated 26 June 2015 and replace this with the details of the current amendment

Na vorige wysigings om nuwer wind turbines toe te laat, wil die aansoeker die OM wysig om nog groter, nuwer wind turbines wat moontlik beskikbaar sal wees met die implementering van die projek en wat die projek beter kan dien. Die voorgestelde wysiging behels:

- 1. Toringhoogte:** Verhoog toringhoogte van turbine van  $\leq 110m$  tot  $\leq 135m$
- 2. Rotor deursnee:** Verhoog maksimum rotor deursnee van  $\leq 160m$  tot  $\leq 186m$
- 3. Turbine nommers:** Verminder turbine posisies van  $\leq 24$  na  $\leq 21$  (laat turbines Nr. 1, 2 en 16 uit)
- 4. Uitleg hersiening:** Mikro-plasing van 8 turbineposisies om hersiene / uitgebreide vlêrmuisbuffersveranderinge (sien turbines 7, 8, 14, 15, 17, 19, 24 en 27) in die ligging en grootte van die turbine te vermy, het 'n geringe hersiening van die ontwerpuitleg vir gepaardgaande infrastruktuur uitgelok (insluitend paaie (breër draaie, hersiene vragmotor-draaiareas), kables, tydelike afsettingsareas en die substasie).
- 5. Opdatering van Aansoeker se adres:** Die Aansoeker het na ander kantore geskuif. Hierdie besonderhede sal gewysig word.
- 6. Opdatering van Voorwaarde 13.17:** Voorwaarde 13.17 moet die verwysing na die gewysigde OIV van 26 June 2016 verwyder en dit vervang met die besonderhede van die huidige wysiging.

This amendment changes the scope of the EA and, in terms of Government Notice Regulation 982 of 4 December 2014 (GN R.982) may change the nature or scope of the associated impacts, and thus a Part 2 EA amendment process has been prescribed in accordance with Section 32 of GN R.982.

Hierdie wysiging lei tot 'n verandering in die omvang van die OM, en in terme van Goewermentskennisgewing Regulasie 982 van 4 Desember 2014 (GK R.982) kan dit lei tot 'n verandering aan die aard of omvang van die gepaardgaande impakte, en dus is 'n Deel 2 OM wysigings proses voorgeskryf in ooreenstemming met Artikel 32 van GK R.982.

The following activities are approved: GN 544: activities 10, 11, 18 and 22; GN 545: activity 1 and 15; and GN 546: activities 4, 12, 13, 14, 16 and 19 of GN No. 546 published in terms of National Environment Management Act (NEMA) (No. 107 of 1998). No new activities are triggered as a result of the amendment.

Die volgende aktiwiteite is goedgekeur GN 544: aktiwiteite 10, 11, 18 en 22; GN 545: aktiwiteite 1 en 15; en GN 546: aktiwiteite 4, 12, 13, 14, 16 en 19 van GN. Nr. 546 gepubliseer ingevolge die Nasionale Omgewingsbestuurswet (NEMA) (Nr. 107 van 1998). Geen nuwe aktiwiteite word veroorsaak as gevolg van die wysiging nie.

The Draft Amendment report will be available from 27 February 2020 at the Kirkwood Library (Middle Street) and Jansenville Library (Church Square) for viewing or download here: <https://tinyurl.com/ryyckvg>.

Die Konsep Wysigings verslag sal beskikbaar wees vanaf 27 Februarie 2020 by die Kirkwood Biblioteek (Middelstraat) en Jansenville Biblioteek (Kerkplein) vir besigtiging of aflaai hier: <https://tinyurl.com/ryyckvg>.

A copy of the report can be emailed on request to the undersigned. If you would like to register as an interested and/ or affected party (I&AP), please send your name and contact details along with any comments or queries you may have, regarding the proposed amendment or the amendment report, in writing to Patrick Killick (Aurecon) by 30 March 2020:

'n Kopie van die verslag kan ge-epos word op versoek aan die ondergetekende. As u wil registreer as 'n belanghebbende en/of geaffekteerde party (B&GP), stuur asseblief u naam en kontakbesonderhede met enige kommentaar of navrae wat u mag hê met betrekking tot die voorgestelde wysiging of die wyigings verslag, skriftelik aan Patrick Killick (Aurecon) teen 30 March 2020:

Tel:	(044) 805 5432	E-mail / E-pos:	Patrick.killick@aurecongroup.com	
Fax / Faks:	(044) 805 5454	Postal address / Posadres:	PO Box 509, George, 6530	



# ANNEXURE E.2

**Proof of letter notification dispatch**

Will be provided as part of final EA Report

# ANNEXURE E.3

Proof of email notification dispatch

Will be provided as part of final EA Report

# ANNEXURE E.4

Copies of written comments received

Will be provided as part of final EA Report

# ANNEXURE E.5

**Proof of attempts to illicit comments**

Will be provided as part of final EA Report