



ENVIRONMENTAL AND SOCIAL ADVISORY SERVICES

06 August 2019

Attention: Caroline Evans

Project Manager

Ukomeleza Wind Farm

**AMENDMENT FOR THE APPROVED 28MW UKOMELEZA WIND ENERGY FACILITY NEAR ADDO, EASTERN CAPE:
ECOLOGICAL SPECIALIST OPINION**

Dear Caroline

Ukomeleza Wind Power (Pty) Ltd. received an environmental authorisation for the Ukomeleza Wind Energy Facility (WEF) on land near Coega, in the Eastern Cape Province of South Africa. Since authorisation, a Part 2 Amendment to the Ukomeleza WEF environmental authorisation are proposed. The proposed amendments (listed in Table 1) received on the 14th June 2019 was assessed to determine impacts on the surrounding ecological landscape. Changes to the layout include:

Table 1. Proposed specification changes to the Ukomeleza Wind Energy Facility

	Currently authorised	Proposed amendment
Output	28MW	40MW
Hub height	137m	Up to 137m
Rotor diameter	132m	Up to 175m
Concrete foundations	25m ² x 3m deep	30m ² x 3m deep
EA validity	28 March 2020	28 March 2025
Road width	Unspecified construction width rehabilitated to an operational width of 8m	Roads increased to a construction width of 14m rehabilitated to an operational width of 8m.

All other specifications as listed in the EIA will remain the same.

Sensitivity:

A new sensitivity map was developed that reflects the proposed amendments (as listed in Table 1) to the Ukomeleza WEF.

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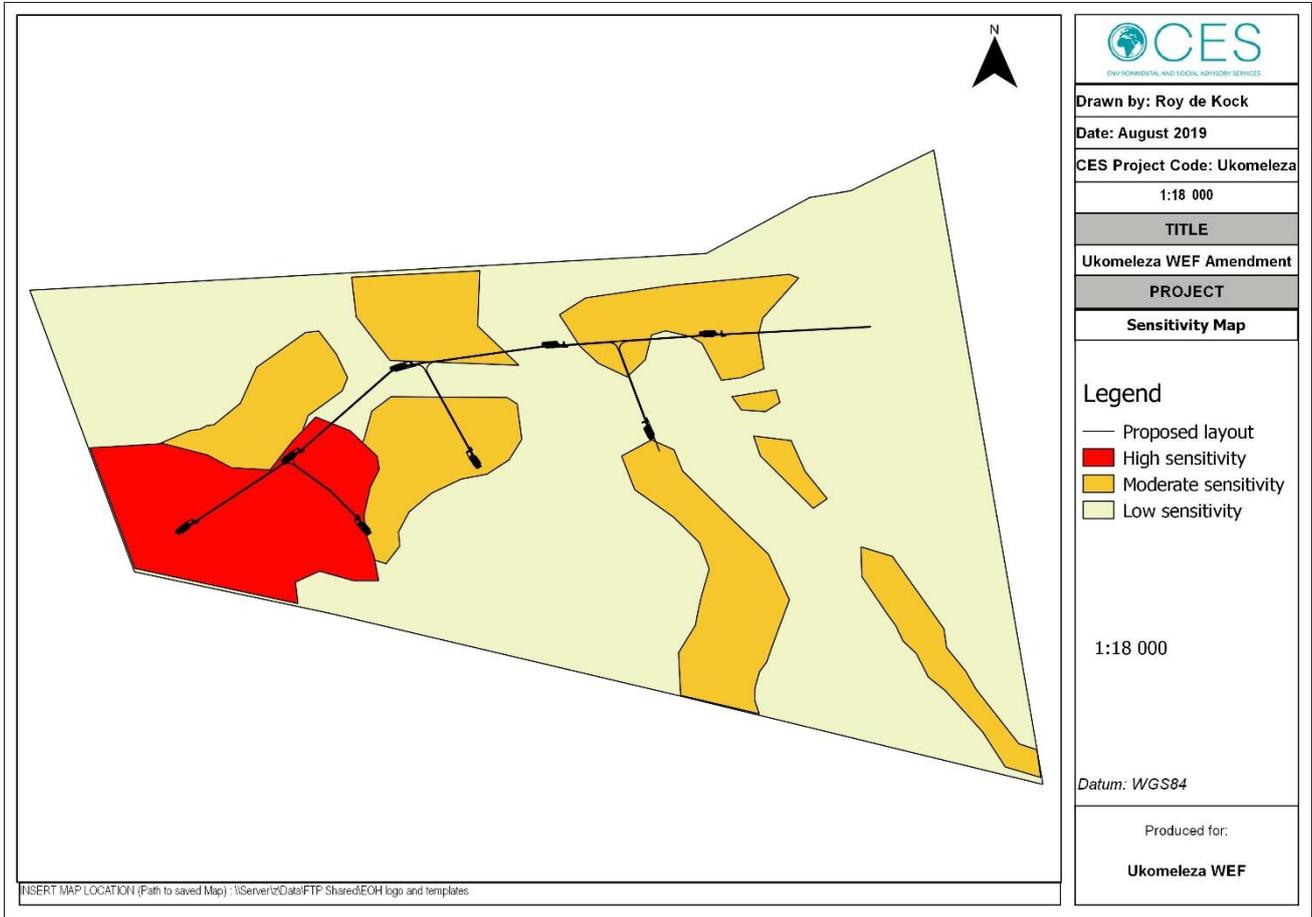


Figure 1. Sensitivity map reflecting the proposed amendments to Ukomeleza WEF

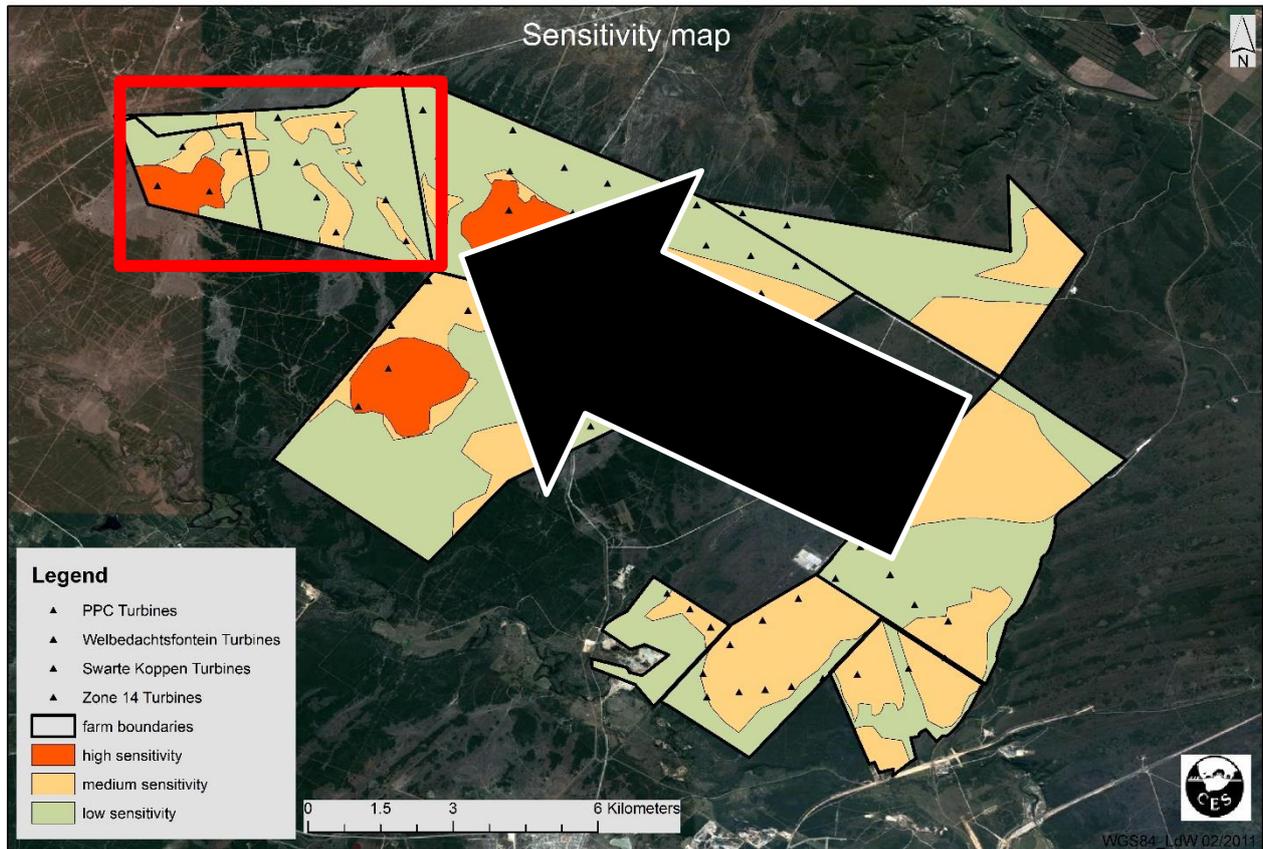


Figure 2. Sensitivity map of the original layout approved.

The following observations were made when comparing this new sensitivity map (Figure 1) to the original sensitivity map (Figure 2) for Ukomeleza WEF:

- Ecological sensitise did not change;

Ecological specialist comments:

The following comments are made to each change in specification as listed in Table 1:



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Table 2. Comments on the proposed specification changes to the Ukomeleza WEF

Proposed new specifications	Effect on mitigation measures	Effect on current EA conditions	Effect on cumulative impacts	Notes on land-use changes
Total output:				
Total output for the WEF will increase from 28MW to 40MW	All mitigations identified in the original Ecological Report are still valid for this change. There are no additional mitigations proposed for this change.	All conditions listed in the EA are still valid for this change. There are no additional conditions proposed for this change.	The proposed change will have no additional cumulative impact on the ecological landscape and therefore no additional cumulative issues were identified. The cumulative impact statement in the original Ecological report is therefore still relevant.	This change will not result in an amendment in land-use as listed in the original Ecological report.
Hub height:				
Hub height are changed from 137m to a height of up to 137m for each turbine	All mitigations identified in the original Ecological Report are still valid for this change. There are no additional mitigations proposed for this change.	All conditions listed in the EA are still valid for this change. There are no additional conditions proposed for this change.	The proposed change will have no additional cumulative impact on the ecological landscape and therefore no additional cumulative issues were identified. The cumulative impact statement in the original Ecological report is therefore still relevant.	This change will not result in an amendment in land-use as listed in the original Ecological report.
Rotor diameter:				
Rotor diameter area are increased from 132m to up to 175m for each turbine.	All mitigations identified in the original Ecological Report are still valid for this change. There are no additional mitigations proposed for this change.	All conditions listed in the EA are still valid for this change. There are no additional conditions proposed for this change.	The proposed change will have no additional cumulative impact on the ecological landscape and therefore no additional cumulative issues were identified. The cumulative impact statement in the original Ecological report is therefore still relevant.	This change will not result in an amendment in land-use as listed in the original Ecological report
Concrete foundations:				
Concrete foundations will increase from 25m ² x 3m deep in size to 30m ² x 3m deep in size for each turbine.	All mitigations identified in the original Ecological Report are still valid for this change.	All conditions listed in the EA are still valid for this change.	Each concrete foundation will increase in size from 75m ³ to 90m ³ . The total naturally vegetated area lost will therefore increase from 600m ³ to 720m ³	The total land-use change will increase from 600m ³ to 720m ³ in size.

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Proposed new specifications	Effect on mitigation measures	Effect on current EA conditions	Effect on cumulative impacts	Notes on land-use changes
	There are no additional mitigations proposed for this change.	There are no additional conditions proposed for this change.	The cumulative impact statement in the original Ecological report is therefore still relevant.	
Road width:				
Road width are increased from unspecified during construction and 8m during operations to 14m, rehabilitated to 8m wide during operational.	All mitigations identified in the original Ecological Report are still valid for this change. There are no additional mitigations proposed for this change.	All conditions listed in the EA are still valid for this change.	The proposed change will have no additional cumulative impact on the ecological landscape and therefore no additional cumulative issues were identified. The cumulative impact statement in the original Ecological report is therefore still relevant.	All rehabilitated road areas must be rehabilitated to functional naturally vegetated land.

Concluding remarks:

The proposed changes to the Ukomeleza Wind Energy Facility will have no additional impact on the ecological landscape and therefore no additional issues were identified when comparing the latest layout (dated 14 June 2019) to the approved Ecological Impact Assessment.

The proposed changes will have no additional cumulative impact on the ecological landscape and therefore no additional cumulative issues were identified when comparing the latest layout (14 June 2019) to the layout assessed in the approved Ecological Impact Assessment. The cumulative impact statement in the original report is therefore still relevant.

No additional ecologically sensitive areas were identified. All sensitivity allocations as listed in the original Ecological Impact Assessment (2016) are therefore still relevant.

All issues identified in the original Ecological Impact Assessment still remain valid and all recommended mitigation measures listed in the Ecological Impact Assessment must still be implemented for all phases of the wind farm.

It is the opinion of the Ecological Specialist that the overall significance of 8 turbines as assessed in the Ecological Impact Assessment has been increased as a result of an increase in the concrete foundations from 25m² x 3m deep in size to 30m² x 3m deep each. None of the other amendments listed in Table 1 will result in a change in overall significance.

No additional No-Go areas were identified as a result of this amendment.

This Letter of Opinion is not a standalone document and the conclusions made must be read in conjunction with the ecological findings of the Ecological Impact Assessment.

Yours faithfully

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Roy is a Principal Consultant holding a BSc Honours in Geology and an MSc in Botany from the Nelson Mandela University in Port Elizabeth. He has recently started a PhD in Botany and Soil Science focussing on the impact of fracking fluids on vegetation and soils in the Karoo Basin. He has been working for CES since 2010, and is based at the East London office where he focuses on Vegetation, Biodiversity, Ecological and Agricultural Assessments, Geological and Geotechnical analysis, Environmental Management Plans, mining applications and various environmental impact studies. Roy has worked on numerous projects in South Africa and Africa at large. Roy is registered with the South African Council for Natural Scientific Professional (SACNASP).

Declaration:

I, Roy de Kock, declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development, application or appeal in respect of which I was appointed other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances that compromise the objectivity of my performing such work.

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