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CK2017/308639/07
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29 November 2022

Att: Nicole Holland
Holland & Associates Environmental Consultants
P O Box 31108,
Tokai, 7966

Dear Nicole

RE: ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH) NEAR DE AAR, NORTHERN CAPE PROVINCE (DFFE REFERENCE NUMBER: 12/12/20/2463/1): APPLICATION FOR AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION

Background

Mulilo Renewable Energy (Pty) Ltd (later updated to Mulilo De Aar 2 South (Pty) Ltd), i.e. the current holder of the Environmental Authorisation) applied for Environmental Authorisation from the Department of Environmental Affairs (DEA) in 2011 to establish a Wind Energy Facility (WEF) and associated infrastructure on the eastern plateau of De Aar (approximately 20 km to the east of the town). The EIA process for the proposed project was undertaken by Aurecon South Africa (Pty) Ltd in 2012 and Environmental Authorisation for the proposed project was granted by DEA on 1 March 2013. The EIA listed activities for which environmental authorisation has been granted includes Items 10, 11 and 18 of GN R.544, Item 1 of GN R. 545 and Item 14 of GN R.546 published in terms of NEMA EIA Regulations (2010). Furthermore, on 24 July 2014, a further environmental authorisation for the project was granted in respect of Items 13 and 16 of GN 546 by the Northern Cape Department of Environment and Nature Conservation (DENC) for activities that had not been applied for in the original EIA for the project.

The original EA for the project authorised 103 wind turbines with a potential capacity of 155 – 258MW and associated infrastructure. Eight amendments to the DEA (now DFFE) EA have been applied for by the Applicant, and granted by DFFE, in 2013, 2014, 2016, 2018, 2019, 2020 and 2021 respectively, including a change in the name of the holder of the EA, extensions of the EA validity period, amendments to Conditions of the EA, amendments to the project description and amendments to the turbine specifications.

The currently authorised project description includes 25 – 61 turbines and associated infrastructure. The proposed final turbine layout for the project consists of up to 28 Wind Turbine Generator (WTG) possible positions, of which up to 26 would be constructed.. The power generated by the project will be transmitted to the national grid via a proposed on-site Eskom Switching Station. This Station will connect via a 132 kV overhead line to a new Main Transmission Substation, subject to a separate Basic Assessment process. The proposed site is situated in the Emthanjeni and Renosterberg Local Municipalities in the Northern Cape Province.

Proposed amendments to the project description in the environmental authorisation

The following non-substantial amendments (underlined below for ease of reference) to the currently authorised project description are proposed:

- **Internal roads (widths):**
  - New roads: 6m width (i.e. change from the authorised 4m wide roads to 6m wide roads);
  - Upgrading sections of existing roads: 6m width (i.e. upgrading from 4m width, to 6m width.
- **Foundations**: Change from the authorised "*18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5 once completed*" to 26 x WTG foundations (up to 24 m diameter maximum at lowest point, up to 12 m diameter at surface).
- **Hardstands**: Change from the authorised "*A permanent hard standing made of compacted gravel and approximately 50 m x 40 m would be constructed adjacent to each turbine location for the crane*", to: 26 x WTG hardstands: Complex geometry (approximate footprint up to 0.47 HA per WTG adjacent to and surrounding each WTG).
- **IPP Substation Control and O&M building**: No changes to development footprint proposed. Co-ordinates of substation in EA to be amended.
- **Temporary Laydown Areas**: No changes proposed, but further detail provided (WTG component laydown, concrete batching plant, office yard).
- **Internal reticulation**: Change from the authorised "22 kV" to 33 kV.
- **Number of turbines**: Change from the authorised "25 – 61" to "up to 26".
- Removal of the MW designation per turbine (generation capacity per turbine).
- Hub height from ground level: Adding the words "up to", i.e. from the authorised "120m", to "up to 120m".
- Rotor diameter: Adding the words "up to", i.e. from the authorised "165m", to "up to 165m".
- Extension of the validity period of the EA. The EA currently expires on 01 March 2023 and the Applicant wishes to extend this by 2 years, i.e. to 1 March 2025.
- Addition of an erroneously omitted Listed Activity into the EA. The Applicant wishes to include Activity 15 of GN R. 545 (Listing Notice 2) into the EA (which relates to the physical alteration and transformation of 20ha or more).
- Addition of Portion 7 of Farm Vendussie Kuil No. 165 into the EA (given that a section of a proposed road would cross the corner of Portion 7 of Farm No. 165, which is currently not included in the EA). This property was included and assessed in the combined EIA process and reporting for the De Aar 2 South WEF and De Aar 2 North WEF in 2012- 2013, and was included in the Final Layout that was recently assessed (2022) by all specialists for the update of the EMP and Final Layout Plan process that is currently in progress).

The proposed amendments to the project description require an amendment to the text of the DFFE EA for the project, accordingly a "Part 1" Application for Amendment of the Environmental Authorisation is being submitted to DFFE.

Refer to the table below outlining the proposed amendments to the specific project components.

Item	Currently Authorised	Proposed Amendment	Approximate Construction Footprint [HA]	Approximate Final Footprint [HA]
Number of Turbines	25-61	Up to 26	N/A (refer to hardstands below)	N/A (refer to hardstands below)
Internal Roads	4m wide	New roads: 6m wide (i.e. 10m working width during	40	24

		construction, rehabilitated to 6 m width during operations). (V-drains will run on either side of the road.)		
		Upgrade sections of an existing private farm road from estimated 4 m <u>to 6 m</u> final width during operations.	2.4	0.8
Foundations	"*The foundation size would be 18.4m in diameter that narrows up to 10.6m at the surface (the visible portion) with a depth of 3.5 once completed*".	Foundations up to <u>maximum 24 m diameter at lowest point and up to 12 m</u> diameter at surface	N/A (included in hardstands footprint)	N/A (included in hardstands footprint)
Hardstands	"*A permanent hard standing made of compacted gravel and approximately 50 m x 40 m would be constructed adjacent to each turbine location for the crane*". (i.e. 0.2 Ha per WTG)	Permanent hard standing made of compacted gravel <u>with approximate footprint up to 0.47 Ha per WTG</u>, adjacent to and surrounding each WTG. Total hard stand footprint for WEF up to maximum 12.2 Ha.	12.2	12.2
IPP Substation, Control and O&M buildings	Substation: Currently authorised: 2ha. EA states "*the proposed substations and associated control buildings would have a footprint of approx. 200 x 100m*".	No change to footprint. Amendment to coordinates in EA (to align with location of substation in Final Layout Plan) Centre co-ordinate of the onsite IPP substation is: 30°35'25.02"S; 24°16'52.93"E	2	2
Temporary Laydown Areas	Total footprint of approximately 24ha for the three construction laydown areas.	No change to footprint. • Construction office/yard. • WTG component laydown area • On-site concrete batching plant	24	0
Internal reticulation	22kV	<u>33kV</u>		

Proposed extension of the validity period of the environmental authorisation

The EA currently expires on 01 March 2023 and the Applicant wishes to extend this by 2 years, to 01 March 2025. The request is to extend the validity period beyond 10 years since the original EA was issued. The original ecological assessment was undertaken in 2011 - 2012 (ecological report dated 7 February 2012) and an ecological assessment was undertaken in 2015 that informed the Part 2 Amendment in 2015. Due to the period of time from then until now, there was the possibility that site conditions may have changed. A site visit was undertaken on 15 - 19 August 2022 to evaluate the proposed final layout. It was found that conditions

on site were the same as when the original survey was undertaken, i.e. the baseline environment has not changed significantly since the original assessments

Proposed amendment to add an erroneously omitted Listed Activity into the EA.

The Applicant wishes to include Activity 15 of GN R. 545 (Listing Notice 2) into the EA (which relates to the physical alteration and transformation 20ha or more). The physical alteration of more than 20ha of the land was assessed in detail as part of the 2012 EIA process and subsequent Part 2 EA amendment process in 2015 for the project, however, this particular listed activity was erroneously omitted from the Application.

Proposed addition of Portion 7 of the Farm Vendussie Kuil No.165 into the EA

The proposed addition of Portion 7 of the Farm Vendussie Kuil No. 165 to the EA is because a section of a proposed road would cross the corner of Portion 7 of Farm No. 165, which is currently not included in the EA. This property was included and assessed in the combined EIA process and reporting for the De Aar 2 South WEF and De Aar 2 North WEF in 2012- 2013 (and was therefore one of the properties assessed in the original Ecological Assessment), and was included in the Final Layout that was recently assessed (2022) as part of the Ecological Walkthrough survey that was undertaken for the update of the EMPr and Final Layout Plan process. (Note: The Ecological Walkthrough Survey Report (2022) is included in the draft Amended EMPr, which together with the proposed Final Layout, is currently undergoing a public participation process as part of a separate process).

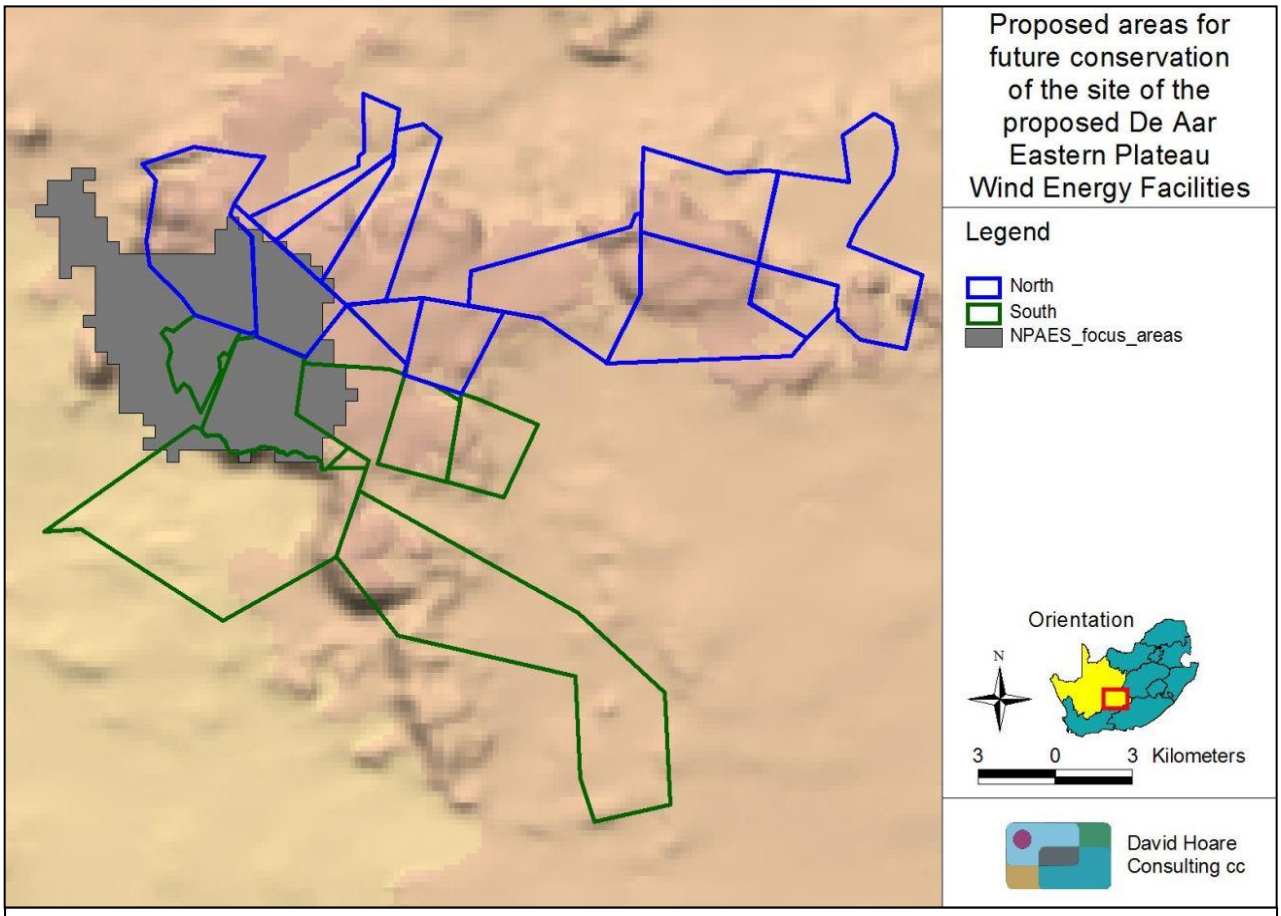

Figure 1: Areas included in the National Protected Area Expansion Strategy (focus areas) at the time of the original ecological assessment in 2012.

Status of the biophysical environment originally assessed

The original ecological assessment is dated 7 February 2012. In the original study (Hoare 2012), the vegetation on site is described as being typical of the regional vegetation types, namely Northern Upper Karee and Besemkaree Koppies Shrubland. Areas of higher sensitivity on site, as identified by Hoare (2012) are all watercourses and drainage areas, as well as natural vegetation which have been included in the National Protected Area Expansion Strategy, although none of these were defined as "No-go" areas. Areas included in the National Protected Area Expansion Strategy are shown in Figure 1 below (as extracted from the original report). **Note that there is no longer an NPAES focus area on site in terms of the 2018 NPAES focus areas - this sensitivity therefore no longer currently applies**.

Similarly, there were previously no CBAs on the site at the time of the original assessment. The Northern Cape CBA map was compiled after the original (2012) assessment. There is now a CBA1 area in proximity to the site (associated with the drainage valley running from north to south along the eastern side of the study area), but no infrastructure is proposed in the Final Layout Plan that would be located within this CBA area (see Figure 2). The entire project area is within an Ecological Support Area.

The conclusion by Hoare (2012) was that the overall impacts of this proposed project would be of low or moderate significance.

Site sensitivity verification

A Screening Tool report for the site indicates the following sensitivities:

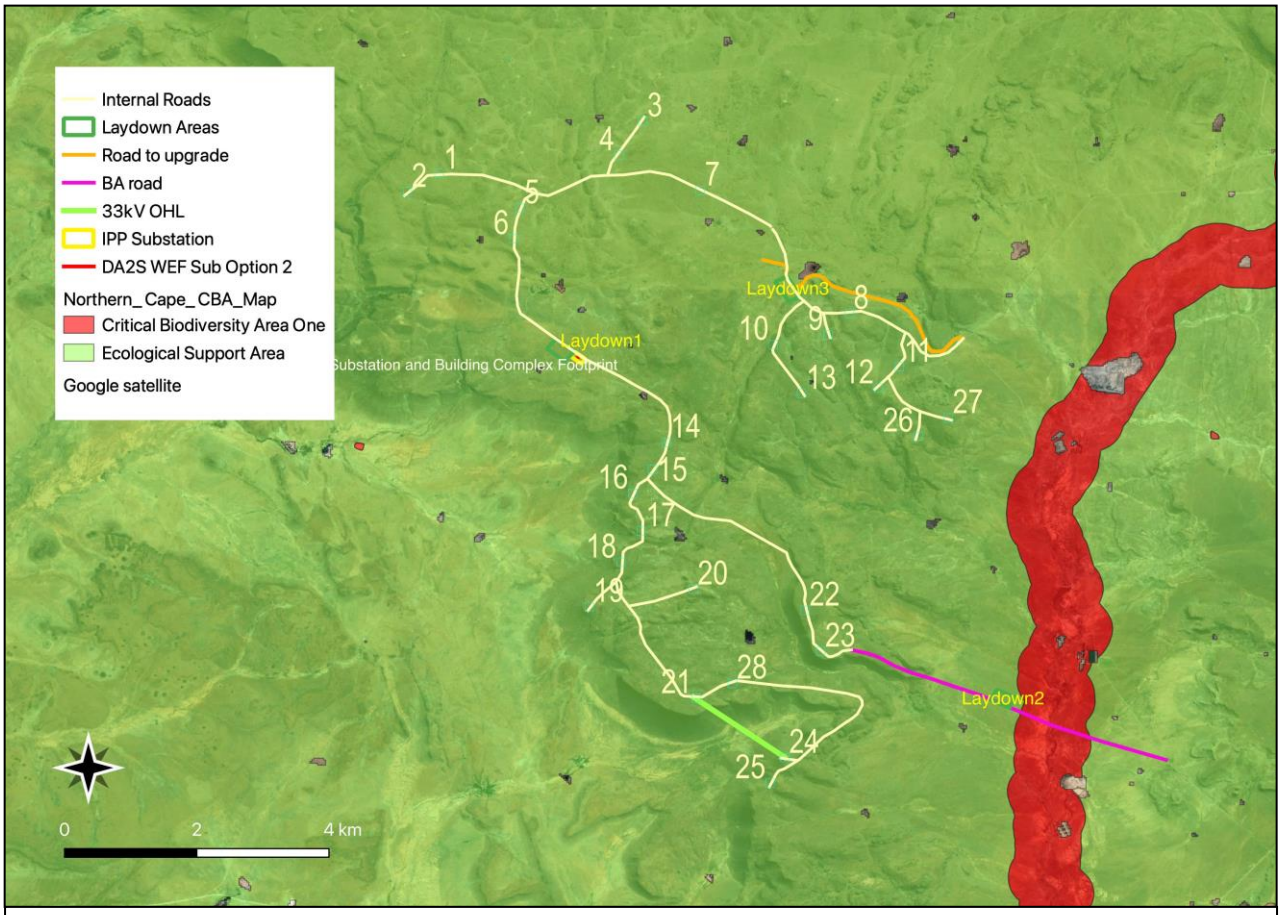

Figure 2: Areas currently included within CBAs and ESAs relative to the proposed infrastructure. Note that these zones did not exist at the time of the original ecological assessment in 2012.

1. Animal Species Theme (HIGH): The animal species flagged for the site are all birds, which are covered by a separate specialist assessment. For remaining (terrestrial) animal species, no sensitivities are flagged. For terrestrial animal species (excluding birds and bats), the site sensitivity is therefore confirmed to have LOW sensitivity.
2. Plant Species Theme (LOW): There are no plant species flagged for the site. This is confirmed from the recent detailed walk-through survey of the site. It is therefore confirmed that the site has LOW sensitivity with respect to the plant species theme.
3. Terrestrial Biodiversity Theme (VERY HIGH): Features flagged for this theme are Ecological Support Areas (confirmed to occur on site) and FEPA Subcatchments (assessed by a separate specialist). On the basis that the majority of the site is in a natural state and occurs within an ESA, it is confirmed that the site has VERY HIGH sensitivity with respect to this theme.

Current status of the biophysical environment

Habitat conditions, as observed on 16 - 19 August 2022 during a recent detailed walk-through survey, match those described in the original study. Broad habitats found on site, as documented in August 2022 are as follows:

Karroid shrubland

The vegetation on site is uniform to some extent, with some variation due to topography, drainage and surface rockiness. In general, the landscape is moderately undulating with moderate to high levels of surface rockiness, and shallow soils. These general areas are mostly dominated by dwarf karroid shrubs, with some low shrubs and herbaceous species in-between. Due to good recent rains, there is currently good grass cover, but this varies according to the amount of rainfall and may be absent at other times of the year.

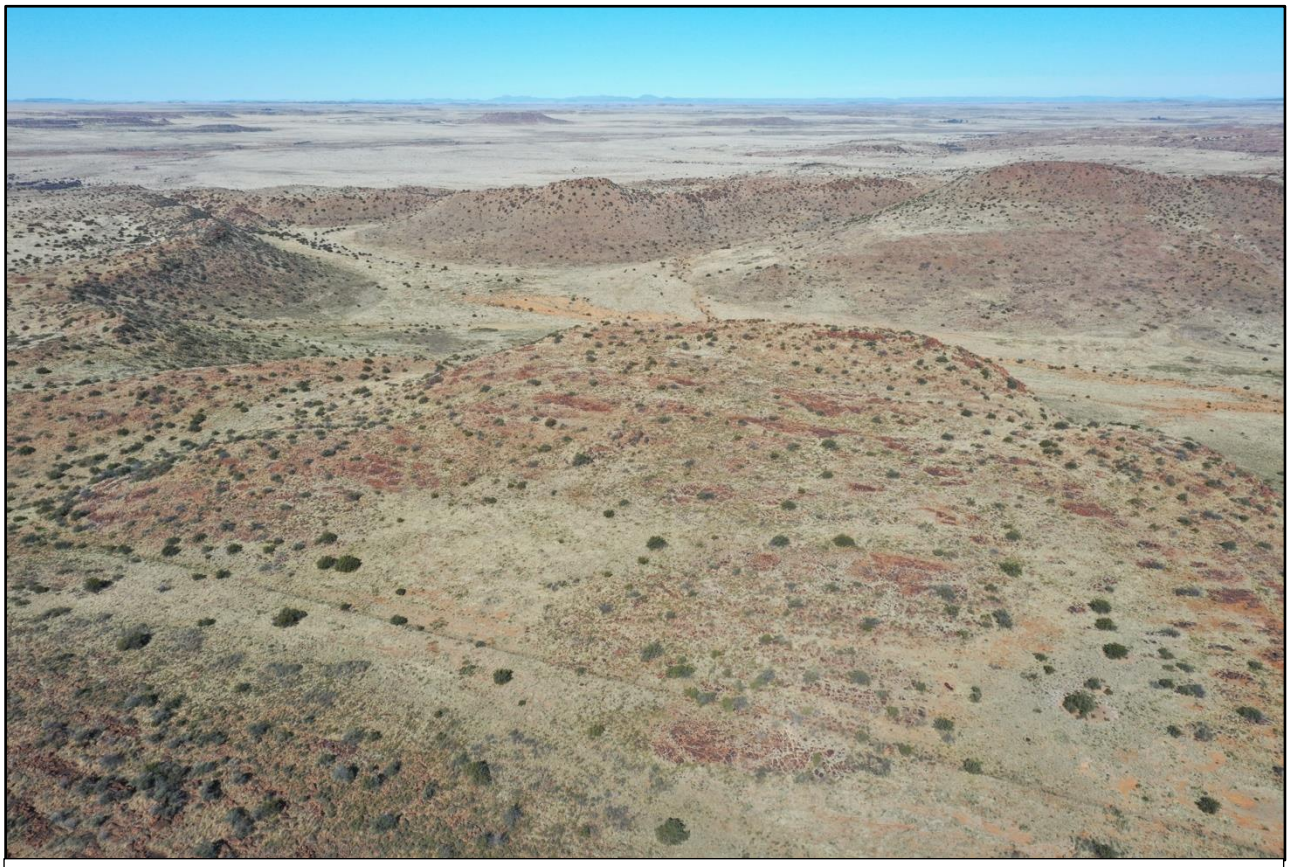

Figure 3: Typical view of vegetation on site.

Common and dominant plant species include the dwarf shrubs *Eriocephalus ericoides, Ruschia intricata, Pentzia incana, Chrysocoma ciliata, Felicia filifolia, Asparagus striatus, Asparagus suaveolens, Melolobium microphyllum, Pteronia glauca, Lasiosiphon polycephalus, Oedera humilis, Pegolettia retrofracta, Hermannia coccocarpa, Hermannia vestita, Euphorbia rhombifolia,* and *Dimorphotheca cuneata*, the low shrubs, *Dodonaea viscosa, Lycium cinereum*, and *Euryops lateriflorus*, and the herbaceous species, *Cheilanthes eckloniana, Felicia muricata, Gazania krebsiana, Aptosimum procumbens, Blepharis mitratis, Stachys rugosa*, and *Ursinia nana*. The shrubs / small tree, *Searsia burchellii*, is scattered throughout the site, varying in density from place to place, but generally present. Common grasses include *Aristida congesta, Aristida diffusa, Aristida adscensionis, Themeda triandra, Heteropogon contortus, Eragrostis obtusa, Eragrostis lehmanniana, Chloris virgata, Hyparrhenia hirta*, and *Eragrostis bergiana*, along with the sedge *Cyperus usitatus*.

This general species composition and structure is applicable to almost all the WTG locations (see Figure 4).

Rocky outcrops

Where there are boulder outcrops or large, flat sheets of rock, the species composition changes. In boulder outcrops, there is a higher cover of low shrubs, including *Euclea crispa, Searsia burchellii, Tarchonanthus minor, Diospyros austro-africana, Diospyros lycioides*, and *Osyris lanceolata*. The understorey includes additional species, typically *Solanum tomentosum* and *Stachys rugosa*, along with the grass *Setaria verticillata*, and the herbaceous species, *Diascia alonsooides*, and *Nemesia fruticans*, amongst others. Flat rocksheets contain a variety of the less common species in the landscape, often characterised by the presence of *Pelargonium abrotanifolium*. Notable species observed on site within these areas are *Freesia andersoniae, Babiana hypogaea, Adromischus trigynus, Crassula dependens, Crassula setulosa, Eucomis autumnalis, Hereroa sp., Pachypodium succulentum, Ruschia indurata, Stomatium mustelinum*, and *Trichodiadema setuliferum*, all of which are provincially protected species. The rock sheets harbour a large proportion of the unusual flora of the landscape and are important refuges for biodiversity.

Areas with high habitat diversity that includes a high proportion of rocky outcrops and rock sheets have been indicated as having higher biodiversity value and sensitivity.

Drainage and wetland areas

Many of the drainage areas on site are dry watercourses with little vegetation, but these coalesce into more defined areas with sandy beds and rocky banks, where species such as *Miscanthus junceus* and *Schoenoplectus* sp. indicate seasonal hydrological systems. There are also some rare areas where seasonally elevated moisture regimes are indicated, and where species such as *Isolepis* sp., *Gnaphalium simii*, and *Lasiopogon* sp. occur. There are some fairly extensive bottomland areas, mostly dominated by grasses, in which deeper, dark clay soils occur. These become waterlogged after rainfall events and may even contain species more typical of permanent wetlands, such as *Potamogeton* sp. One of the dominant grasses in these areas is *Eragrostis bicolor* (speckled vlei grass), which grows in water, moist soil or dry pans. The habitat may be important for frogs, and the pygmy toad, *Poyntonophrynus vertebralis*, has been recorded on site within this habitat during wet parts of the season. The species composition and physical characteristics suggest that these are areas that function somewhat like pans and are important hydrological systems within this semi-arid landscape. Lowland areas that become waterlogged have been designated here as having higher sensitivity.

Steep scarp slopes

No species compositional data was collected in these areas during the walk-through because no WTG infrastructure is located within them. However, there are small sections of road infrastructure that cross steep slopes at local sites. They tend to have significantly higher shrub cover and rock cover. The main sensitivity associated with these areas is the high potential for erosion, especially if roads are built through them, due to the increased velocity of runoff.

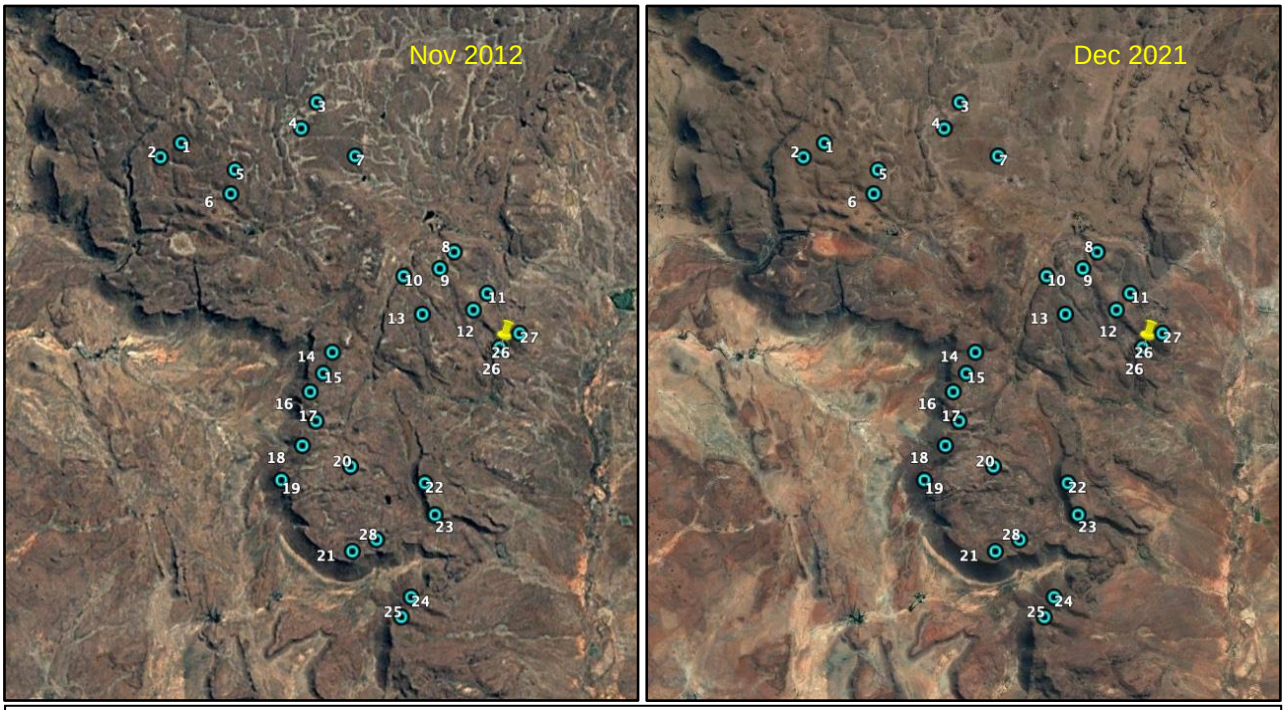

Figure 4: Google Earth imagery of the site for different dates.

Changes to the status of the biophysical environment

The vegetation pattern as originally described (Hoare 2012) has remained stable. A field survey of the site on 16 - 19 August 2022 shows that the original survey is valid and that the on-site conditions have not changed.

Google Earth provides historical aerial imagery that can be used to evaluate changes in a landscape over time. For the current site, detailed imagery is available as far back as 1984, and includes 2011/2012. Examples for the site from various dates going back in time are shown in Figure 4 (WTG positions shown). At the time that the original ecological assessment was undertaken, imagery from Google Earth shows that the site was in a natural state, with no obvious impacts. The vegetation appears from the imagery to be sparse with underlying topography and drainage showing through strongly (confirmed during the field survey on 16 - 19 August 2022). This pattern extends in all directions and for some distance away from the site. The relative uniformity of the area is confirmed from these images and from the recent verification survey.

As described in the previous paragraph, available information from historical aerial imagery and from a verification field survey indicates that the biophysical environment on site is unchanged between the original assessment and the current date.

Review of initial assessment and mitigation measures

The original assessment (Hoare 2012) identified two impacts for the proposed project, as follows:

- Loss or fragmentation of indigenous natural vegetation (Low or very low significance after mitigation, except for roads, which are medium significance after mitigation)
- Establishment and spread of declared weeds and alien invader plants (Low significance after mitigation)

Several mitigation measures were proposed in the original assessment (Hoare 2012), as follows:

- Unnecessary impacts on surrounding natural vegetation must be avoided. The construction impacts

must be contained to the footprint of the turbines and laydown area, or the tower structures and/or the servitude of the power line
- Existing access roads must be used, where possible.
- Service roads in the servitude must be properly maintained to avoid erosion impacts.
- Disturbed areas must be rehabilitated as soon as possible after construction, using site-appropriate indigenous species.
- Disturbance of indigenous vegetation outside of the footprint of construction must be kept to a minimum.
- Where disturbance is unavoidable, disturbed areas should be rehabilitated as quickly as possible.
- Any alien plants within the control zone of the company must be immediately controlled to avoid establishment of a soil seed bank. Control measures must follow established norms and legal limitations in terms of the method to be used and the chemical substances used.
- An on-going monitoring programme should be implemented to detect and quantify any aliens that may become established and provide information for the management of aliens.
- For roads, steep slopes must be avoided, if possible.

No plant species of concern were detected by Hoare (2012). During the current survey, a long list of provincially protected plant species was found within the footprint of the proposed infrastructure. The purpose of the current survey was to detect such species, as well as to confirm on-site sensitivities.

New proposed mitigation measures

The original mitigation measures are valid, but additional measures have been included in the Ecological Walkthrough Survey Report (dated November 2022) for inclusion in the EMPr and Layout Plan finalisation process that is currently underway, to align with current best practice.

The following mitigation measures are proposed to supplement those in the original assessment (note that all mitigations outlined below have already been undertaken and/or actioned by David Hoare Consulting (Pty) Ltd., and the plans outlined have been included in the draft Amended EMPr that is currently undergoing a public participation process):

1. Compile and implement the following management plans, which should be included in the updated EMPr, each of which should include appropriate monitoring guidelines:
    a. Rehabilitation Management Plan.
    b. Alien Invasive Management Plan.
    c. Open Space Management Plan.
    d. Plant Rescue/Protection Management Plan.
2. Obtain all required protected flora permits from the relevant authorities. This is primarily a legal compliance measure and is not necessarily to mitigate any specific impacts.

Assessment of cumulative impacts on the biophysical environment

The original ecological assessment (Hoare 2012) indicates that possible issues of concern for cumulative impacts are as follows:

- Loss or fragmentation of indigenous natural vegetation,
- Establishment and spread of declared weeds and alien invader plants.

The spatial extent of cumulative impacts can be calculated by determining the loss of habitat within the footprint area of the project relative to the extent of similar habitat within an assessed area. The 2018 National Land Cover dataset has land cover data in 73 natural, degraded and transformed categories. Statistics can be extracted using a GIS algorithm that provides proportions of different land cover classes within 30 km of the current site (Figure 5). Only those classes that occur within the footprint area are of interest to the analysis since it is these classes that are affected by the proposed project.

The total number of hectares within 30 km of a point is 282743 ha.

Other renewable energy projects within 30 km of the current site are shown in Figure 6. The projects were identified using the latest (2022) Renewable Energy EIA Application Database for SA from the Department of Fisheries, Forestry and Environment (DFFE).

The exact areas for each of these projects is now known, but an estimate of 3500 ha is made for the total footprint of the combined projects. It is also assumed that similar land cover classes are affected as for the current project. The outcomes of the analysis of possible impacts on spatial extent are as follows:

1. Within 30 km of the current project, 96.2% of the landscape (271993 ha) is still in a natural state.
2. The loss of habitat predicted to occur due to the current project is 0.21% of the remaining natural habitat within 30 km of the current site. This is negligible.
3. A maximum of 1.21% of the remaining natural habitat within 30 km of the current site is potentially affected by all combined projects on the renewable energy database. This total cumulative spatial effect is small.

In the original assessment (Hoare 2012), two cumulative impacts were assessed, as follows:

1. Loss or fragmentation of indigenous natural vegetation,
2. Establishment and spread of declared weeds and alien invader plants.

The significance of the cumulative impacts for the combined projects was originally assessed as being medium. The proposed amendments do not affect the level of the cumulative impacts originally assessed. The cumulative impacts are considered to be acceptable.

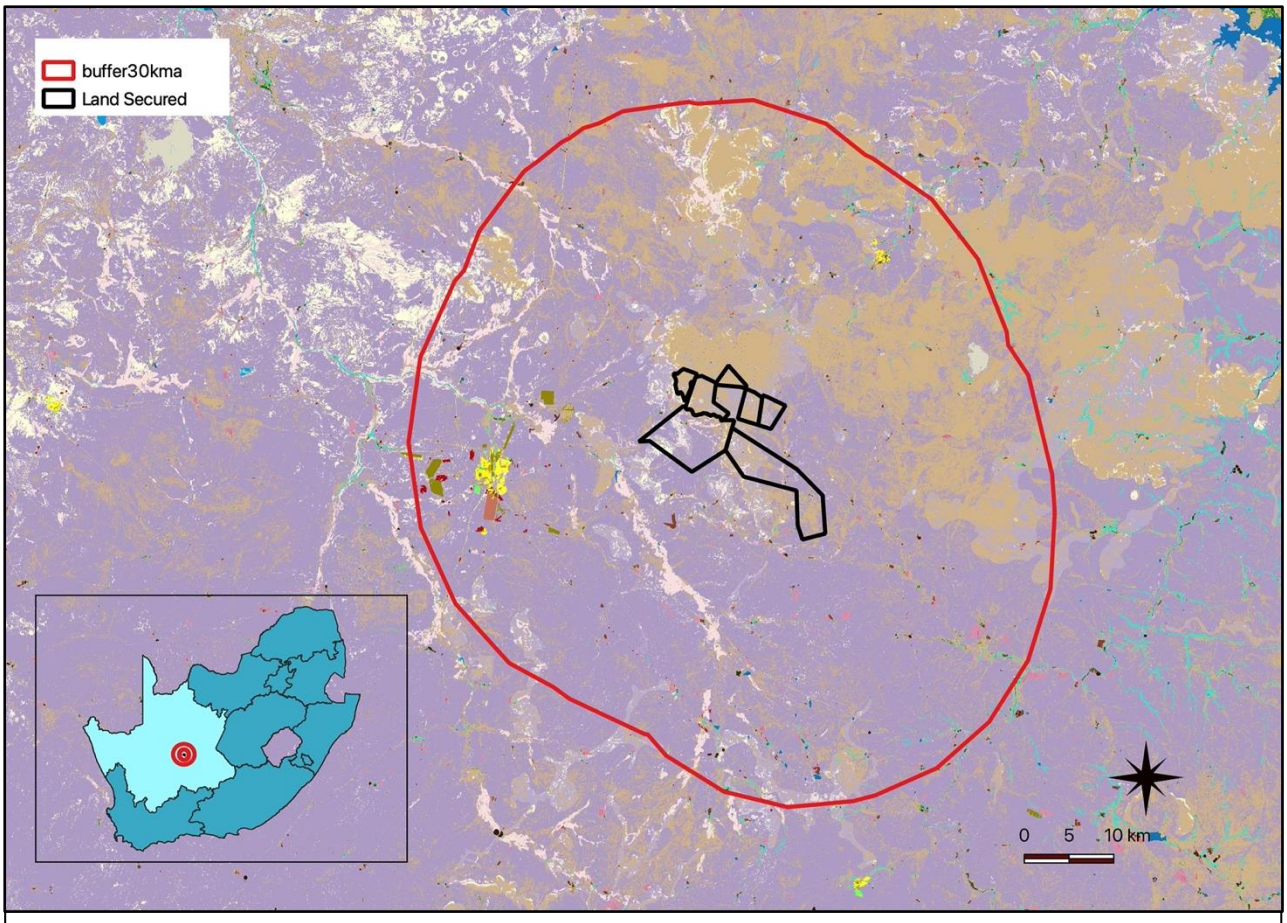

Figure 5: National Land Cover 2018 classes for the areas within 30 km of the current site.

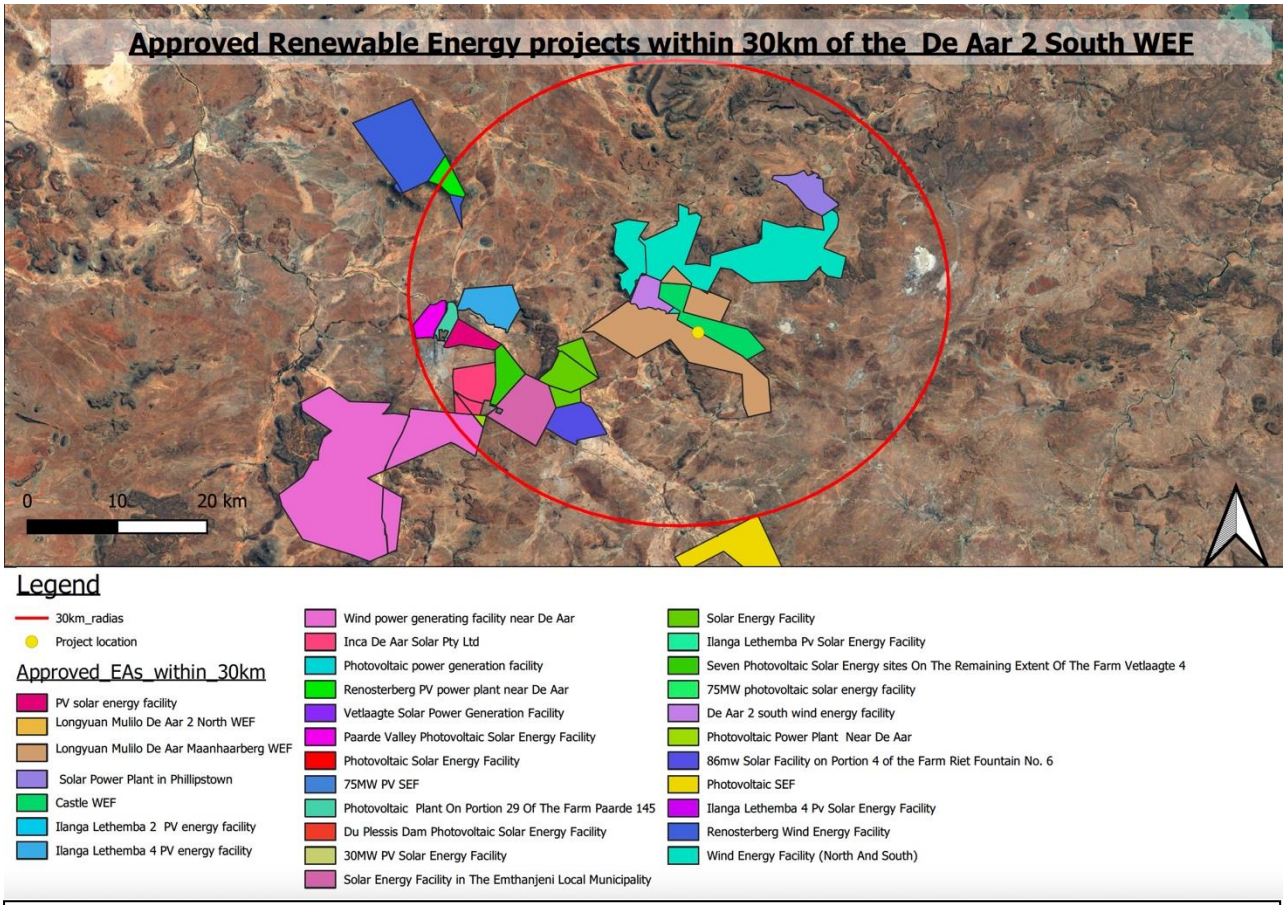

Figure 6: Planned renewable energy projects within 30 km of the current site.

Table 1: Renewable energy projects within 30 km of the current project, as per DFFE Screening Tool Report.

Project name	Reference number	Type	Status
Proposed Castle wind energy facility project, located near De Aar, Northern Cape Province	14/12/16/3/3/2/278	WEF	Approved (Note: "in process" according to DFFE REEA 2022 Q2)
Longyuan Mulilo De Aar 2 North Wind Energy Facility	12/12/20/2463/2	WEF	Approved (Operational)
Proposed PV facility on farm Jakhalsfontein near De Aar	14/12/16/3/3/2/744	Solar	In process
The Proposed Construction Of A Solar Energy Facility in The Emthanjeni Local Municipality In The Northern Cape Province	12/12/20/2250	Solar	Approved
Proposed PV facility on farm Caroluspoort near De Aar	14/12/16/3/3/2/741	Solar	In process
Proposed Solar Power Generation Facility in the remaining extent of the farm Vetlaagte 4, De Aar, Northern Cape Province	14/12/16/3/3/2/382/1	Solar	Approved
The Photovoltaic (Pv) Solar Energy Facility On The Farm Annex Du Plessis Dam (Pv4) Near De Aar Within The Emthanjeni Local Municipality, Northern Cape Province	12/12/20/2498	Solar	Approved
Proposed Inca De Aar Solar Pty Ltd 30 MW Photovoltaic Solar Facility On A Site South-East Of De Aar, Northern Cape Province	12/12/20/2177	Solar	Approved

The Proposed Construction Of Ilanga Lethemba Pv Solar Energy Facility In De Aar, Northern Cape Province	12/12/20/2048/1	Solar	Approved
The Construction Of A Photovoltaic (Pv) Plant On Portion 29 Of The Farm Paarde 145, De Aar Within Emthanjeni Local Municipality, Northern Cape Province	12/12/20/2025	Solar	Approved
Proposed photovoltaic power generation facility near De Aar, Northern Cape	12/12/20/1673	Solar	Approved
Proposed PV facility on farm Blaauwkratz near De Aar	14/12/16/3/3/2/742	Solar	In process
Proposed PV facility on farm Loskop near De Aar	14/12/16/3/3/2/743	Solar	In process
Proposed 300MW Solar Power Plant in Phillipstown area in Renosterberg Local Municipality	14/12/16/3/3/2/740	Solar	Approved
The Proposed Establishment of Photovoltaic (Solar Power) Farms in The Northern Cape Province	12/12/20/2258/4	Solar	Approved
Proposed establishment of a wind power generating facility near De Aar, Northern Cape.	12/12/20/1651	WEF	Approved
The Proposed Establishment of an 86mw Solar Facility on Portion 4 of the Farm Riet Fountain No. 6 in the Emthanjeni Local Municipality, Northern Cape Province	14/12/16/3/3/2/663	Solar	Approved
Proposed photovoltaic Solar energy facility (PV2) on Badenhost Dam Farm near De Aar in the Northern Cape Province	14/12/16/3/3/2/504	Solar	In process
The Proposed Photovoltaic (Solar) Energy Facilities On Du Plessis Dam Farm Near De Aar, Emthanjeni Local Municipality, Northern Cape Province.	14/12/16/3/3/2/456	Solar	In process
The Construction of A 75-150mw Photovoltaic Solar Energy Facility And Associated Infrastructure On Paarde Valley Farm Near De Aar Within The Emthanjeni Local Municipality, Northern Cape Province	12/12/20/2500	Solar	Approved

Assessment guidelines applicable since original assessment

The original ecological assessment was undertaken in 2012 (final report dated 7 February 2012) according to the Environmental Impact Assessment Regulations, 2006. At that time specialist studies were required to comply with Appendix 6 of the EIA Regulations. These have now been superseded by Protocols that have been gazetted in terms of sections 24(5)(a) and 24(5)(h) of NEMA. For Biodiversity-related themes, protocols have been gazetted for the specialist assessment and minimum report content requirements for environmental impacts on the following:

1. terrestrial biodiversity
2. aquatic biodiversity
3. terrestrial animal species
4. terrestrial plant species

These gazetted protocols do not apply to applications for amendments to environmental authorisation that were issued under the earlier Regulations.

Implications of proposed amendments

The current proposed final layout is in approximately the same position as that authorised. There are now fewer turbine locations, as well as a less extensive road network. The current final proposed layout therefore has a smaller overall footprint than the authorised layout, especially in terms of the overall area affected.

The original ecological assessment was undertaken in 2011 (ecological report dated 7 February 2012) and an ecological assessment was undertaken in 2015 that informed the Part 2 Amendment in 2015. Due to the period of time from then until now, there was the possibility that site conditions may have changed. A site visit was undertaken on 15 - 19 August 2022 to evaluate the proposed final layout. It was found that conditions on site were the same as when the original survey was undertaken. Therefore, the original assessment of the Mulilo De Aar 2 South WEF site is valid. The original assessment identified two impacts for the WEF area, as follows:

- Loss or fragmentation of indigenous natural vegetation (Low significance for turbines and powerlines, Medium significance for internal road network)
- Establishment and spread of declared weeds and alien invader plants (Medium significance for all infrastructure).

Based on the re-visit to the site and a review of the original report and Addendum Report (July 2015) for the Part 2 EA amendment in 2015, these assessments remain valid. The proposed amendments do not affect the significance level of the assessed impacts.

The baseline environment has not changed significantly since the original assessments. The proposed amendments will not result in an increased level or change in the nature of the impact, which was initially assessed and considered when application was made for the environmental authorisation and subsequent Part 2 EA amendment in 2015 - 2016.

The inclusion of Activity 15 of GN R. 545 (Listing Notice 2) into the EA (which relates to the physical alteration and transformation 20ha or more) will not result in any change to the assessment. The physical alteration of more than 20ha of the land was assessed in detail as part of the 2012 EIA process and subsequent Part 2 EA amendment process in 2015 for the project therefore the inclusion of the item has no effect on the assessed impacts.

The cumulative impact due to the proposed current project is negligible and therefore the same mitigation measures apply to all.

In conclusion, the proposed amendments of the Environmental Authorisation for the project will not change the nature or significance of the assessed potential impacts. No additional impacts will occur. The baseline conditions have also not changed; therefore, the original assessment is valid. The proposed amendments are therefore acceptable from an ecological impact perspective. It is the opinion of the specialist that the proposed amendments can be approved.

Yours faithfully,

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Dr David Hoare
Director