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Attention: Humansrus Solar PV Energy Facility 2 (Pty) Ltd
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To whom it may concern:

AVIFAUNA SPECIALIST INPUT FOR THE PART 1 AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (EA) FOR THE PROPOSED DEVELOPMENT OF THE HUMANSRUS SOLAR PV ENERGY FACILITY 2 (PTY) LTD (PREVIOUSLY KNOWN AS THE RE CAPITAL 14 SOLAR POWER PLANT) GRID CONNECTION, HUMANSRUS, NORTHERN CAPE.

1. Background

Humansrus Solar PV Energy Facility 2 (RF) (Pty) Ltd proposes an amendment of the Environmental Authorisation (EA) for the construction, operation and maintenance of the grid connection (referred to as HR2). The grid connection runs from the proposed solar photovoltaic (PV) Project, Humansrus Solar PV 2, with a generation of 100 megawatt (MW), to the nearby Kronos substation. The project is located near Copperton, within the Remainder of Farm 147, Humansrus, within the Pixley Ka Seme District in the Northern Cape Province, under the jurisdiction of the Siyathemba Local Municipality, in the Northern Cape Province.

The proposed project consists of the construction of a new 132 kilo-volt (kV) powerline linking the onsite substation 1 to the existing Kronos substation. The powerline runs from the proposed Humansrus Solar PV 2, parallel to the gravel road, R357 (Prieska-Vanwyksvlei), across the farm Hoekplaas 146 property, to the existing Kronos substation. The powerline is approximately 4.5 km in length. A 50 metre (m) buffer was applied to the provided powerline to determine the Project Area of Influence (PAOI) for the purposes of this report (Figure 1). The powerline route is described as the “REC 14 PV PLine Selfbuild Kronos Sub1_01” in the original EA (2014) as a potential alternative. The EA has also subsequently been amended to the current route, being the preferred route (2016).

Condition 6 of the Environmental Authorisation issued on the 30th of April 2015, DEA Reference 14/12/16/3/3/1/1318 states that:

“This activity must commence within a period of five (5) years from the date of issue of the authorisation (i.e. the EA lapses on 30 April 2020). 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 EA for Humansrus Solar PV 2 Grid Connection (HR2) is nearing expiration, and as such, Humansrus Solar PV Energy Facility 2 (Pty) Ltd is applying for an extension of the validity of the existing Environmental Authorisation. The amendment request is to extend the validity period of the Environmental Authorisation by an additional 10 years to 2035.

Cape EAPrac has been appointed as the Registered Environmental Assessment Practitioner (EAP) to prepare the EA Amendment Application. The EA Amendment is being completed in terms of Regulation 29 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended and in terms of Regulation 30(1)(a), Department of Forestry, Fisheries and the Environment (DFFE) have requested specialist input to inform the amendment application.

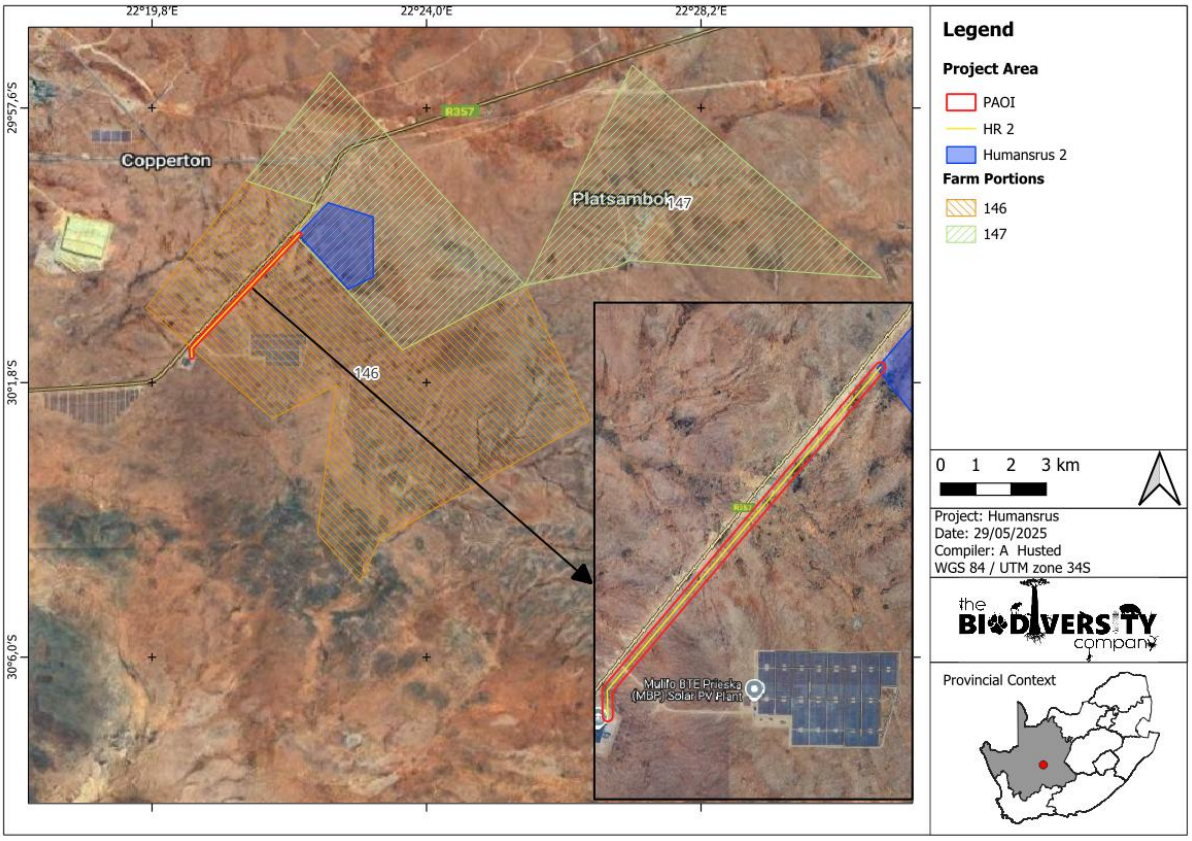


Figure 1 The Project Area of Influence, consisting of the proposed powerline route with a 50-meter buffer. Humansrus Solar PV 2 and the farm portions are also shown.

2. Scope of Work

The Biodiversity Company was appointed to provide specialist inputs for this Amendment Application. The Scope of Work for this report is as follows:

- Confirmation of the status of the environment compared to that at the time of the original assessments done in 2014 by Simon Todd.
- An indication as to whether the impact rating as provided in the initial assessment remains valid; if the mitigation measures provided in the initial assessment are still applicable; or if there are any new mitigation measures which need to be included into the EA, should the request to extend the commencement period be granted by the DFFE.
- An indication as to whether there are any new assessments/guidelines which are now relevant to the authorised development, which were not undertaken as part of the initial assessment, must be taken into consideration and addressed in the report.
- A description and an assessment of any changes to the biophysical environment that has occurred since the initial EA was issued.
- A description and an assessment of the surrounding environment, in relation to new developments or changes in land use which might impact on the authorised project, the assessment must consider the following:
    - Identified cumulative impacts, and where possible the size of the identified impact must be quantified and indicated, i.e., hectares of cumulatively transformed land.

3. Assumptions and Limitations

A field survey was conducted to meet the amendment requirements. The field survey sought to determine site characteristics and conditions to determine any changes from the baseline conditions and previous reports, supplemented by satellite imagery. The field survey was conducted during January 2025, which constitutes the wet season (between August to April). Despite the survey being conducted during the preferred season, site conditions were 'dry' for the period. However, this doesn't present a limitation for the purposes of this amendment process.

4. Project Description

The project description remains as per the EA and no changes to the scope are proposed as part of this EA Amendment process. The project description, as authorized includes:

- 132 kV overhead transmission powerline, connection Humansrus PV Solar Energy Facility 2 to the nearby Kronos Eskom substation;
- Pylon structures of approximately 21 m in height; and
- Access or maintenance track beneath or parallel to the overhead line.

5. Site Baseline and Sensitivity (2014)

1 The following assessments were considered for this report:

1.1. Simon Todd (2014). Environmental Impact Assessment for the Proposed RE Capital 13 (Humansrus PV 1) Solar Power Plant, Humansrus, Northern Cape.

1.2. Simon Todd (2014). Environmental Impact Assessment for the Proposed RE Capital 14 (Humansrus PV 2) Solar Power Plant, Humansrus, Northern Cape.

1.3. Simon Todd (2014). Environmental Impact Assessment for the Proposed Humansrus PV 2 Grid Connection, Humansrus, Northern Cape.

1.4. Simon Todd (2016). Environmental Impact Assessment for the Proposed Humansrus Solar 3 PV Facility Development, South-West of Prieska, Northern Cape: Avifaunal Impact Study.

1.5. Simon Todd (2016). Environmental Impact Assessment for the Proposed Humansrus Solar PV Facility 4 Development, South-West of Prieska, Northern Cape: Avifaunal Impact Study.

2 The following is summarised for the avifauna theme:

2.1. One habitat was identified, and the site is described as broadly homogenous. The habitat is described as typical of the Bushmanland Basin Shrubland, with low shrub species and perennial grasses dominating. Changes in the soil depth and slope position affect the moisture distribution, leading to fine-scale variation in vegetation. Most of the area consists of shallow stony soils with areas of exposed calcrete or loose stones.

2.2. The data from the Humansrus PV 2 were considered supplementary data for assessing the Grid connection. The only avifauna Species of Conservation Concern (SCC) reported to be observed was Ludwig's Bustard (*Neotis ludwigii*). However, this predates the 2015 Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland, which indicates regionally threatened species in these countries. This could imply that some avifauna species observed

at the time of the survey were not considered an SCC and were not referred to in the report as a result, but as of 2015 are now regarded as an SCC. Such as the Karoo Korhaan (*Eupodotis vigorsii*). In the two 106 reports, two additional SCCs were reported to be observed, the aforementioned Karoo Korhaan (*Eupodotis vigorsii*) and Kori bustard (*Ardeotis kori*).

- No sensitivity mapping was completed. However, it is noted that the habitat type is "not considered highly sensitive." Moreover, the relative impact of the development is rated as "Low" due to the low sensitivity of the receiving environment and the proximity of the route to the existing road.

6. Site Baseline and Sensitivity (2025)

A specialist from The Biodiversity Company (TBC) undertook a site survey on the 15th and 16th of January 2025. The pictures below were taken during the site visit (Figure 2).

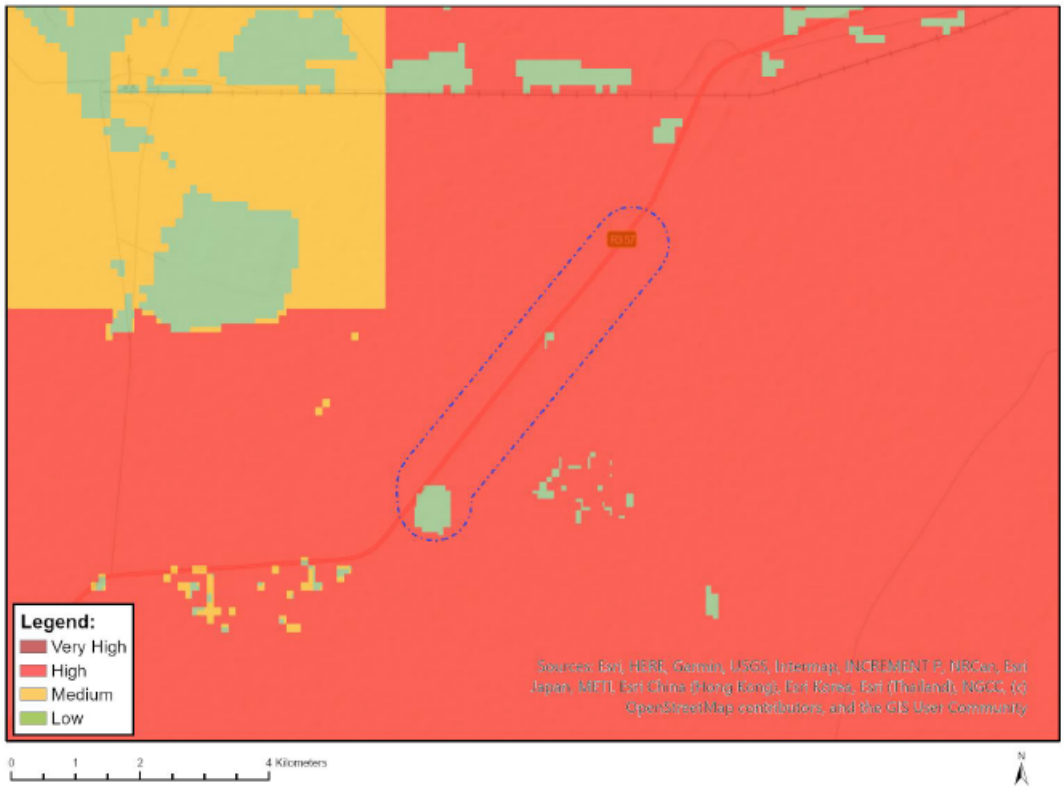
Figure 2 ***Example of the vegetation represented within the PAOI considered for this amendment.***

3.1 DFFE screening tool

- A screening tool was generated for the PAOI. Below are the outcomes for each (applicable) theme:

  Animal Species Theme – High. This is due to the possible presence of two high and sensitivity avifauna Species of Conservation Concern (SCC), namely *Falco biarmicus* and *Neotis ludwigii* (Figure 3).

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Neotis ludwigii
High	Aves-Falco biarmicus
Low	Subject to confirmation

Figure 3 ***Figure indicating the relative Animal Sensitivity Theme Sensitivity as identified by the Environmental Screening Tool for Humansrus Solar PV 2 Grid Connection***

Table 1 ***The comparison of the screening tool sensitivity vs the specialist assigned sensitivity***

Screening Tool Theme	Screening Tool	Specialist	Tool Validated or Disputed by Specialist - Reasoning
Animal Theme	**High**	**Low**	Disputed – The PAOI is homogenous and has some capability of supporting avifauna species. Some SCC may occasionally move through the area, but it is unlikely that any SCC are resident.

7. Project Impacts

Table 2 highlights the impacts that were identified during the 2014 assessment:

Table 2 Summary table of the impacts associated with the development of the project (Todd, 2014)

Phase & Impact	Without Mitigation	With Mitigation
Planning & Construction		
Impacts on vegetation and listed or protected plant species resulting from construction activities	Medium-Low Negative	Low Negative
Direct Faunal Impacts During Construction	Medium Negative	Low Negative
Operation		
Avifaunal impact due to collision or electrocution from power line.	Medium-Low Negative	Low Negative
Ecosystem degradation along the power line route due to erosion and alien plant invasion.	Medium-Low Negative	Low Negative

The quantitative impacts of the proposed project in isolation on terrestrial biodiversity are anticipated to be "Low" overall provided that the mitigation measures recommended in the 2014 report are implemented (Table 3).

Table 3 Quantitative impact assessment of the project in isolation

Impact	Project in Isolation							
	Duration of Impact	Spatial Scope	Severity of Impact	**Consequence**	Sensitivity of Receiving Environment	Probability of Impact	**Likelihood**	Significance (with mitigation)
Destruction, fragmentation of the vegetation community, and loss of habitat; spread of alien and invasive species; displacement and mortality of the faunal community	4	2	3	9	2	3	5	
	Life of operation or less than 20 years: Long Term	Development specific/ within the site boundary / < 100 ha impacted / Linear features affected < 100m	Significant / ecosystem structure and function moderately altered		Ecology with limited sensitivity/Importance	Likely		**Low**

The quantitative impact assessment of the proposed project aligns with the findings of Todd (2014) as depicted in the table below (Table 4).

Table 4 Comparison of the quantitative impact assessment of the initial survey (Todd, 2014) and the latest survey (TBC, 2025)

Phase	Impact	Todd (2014) With mitigations	TBC (2025) With mitigations
Planning and Construction	Impacts on vegetation and listed or protected plant species resulting from construction activities	Low Negative	Low Negative
	Direct faunal impacts	Medium Negative	Low Negative
Operation	Ecosystem degradation due to erosion and alien plant invasion	Low Negative	Low Negative
	Avifauna impact due to collision or electrocution from power line	Low Negative	Medium Negative

It is the opinion of the specialist that the original assessment for the facility in isolation findings appear to be appropriate, and the assignment of the "Low" sensitivity, and subsequent "Low Negative" with mitigations) impact significance is still valid.

8. Mitigation Measures

No additional mitigation has been proposed as the original assessment is still deemed to be sufficient, as discussed in the report, even though considered to be medium negative with mitigation impact.

9. Cumulative Impacts

No cumulative impact assessment was completed in the 2014 study. The following is noted:

The development would however contribute to cumulative impacts in the area, which are becoming increasingly large given the concentration of renewable energy facilities in the immediate area. However, the total footprint of the power line would be low and the contribution to avifauna habitat loss would be very small and is not considered significant

An in-situ review of similar developments under the current conditions was undertaken. See Table 5.

Table 5 The in-situ cumulative impact assessment of the current conditions for the project

Impact	In-situ cumulative impacts							
	Duration of Impact	Spatial Scope	Severity of Impact	**Consequence**	Sensitivity of Receiving Environment	Probability of Impact	**Likelihood**	Significance (with mitigation)
Destruction, fragmentation of the vegetation community, and loss of habitat; spread of alien and invasive species; displacement and mortality of the faunal community	4	4	2	10	2	3	5	
	Life of operation or less than 20 years: Long Term	Regional within 5 km of the site boundary / < 2000ha impacted / Linear features affected < 3000m	Small / ecosystem structure and function largely unchanged		Ecology with limited sensitivity/importance	Likely		**Low**

The cumulative impacts of the proposed project on avifauna biodiversity are anticipated to be “Low” Negative due to the number of similar projects currently within the direct area. Please note, this rating is in-situ and takes into account only the existing current similar developments, not future developments.

Todd notes that the habitat is not “rare or sensitive” and the location of the project is preferable as it is located within a development cluster near the Kronos and Cuprum substation. The current assessment agrees with this statement.

10. Summary Of Findings

The initial biodiversity study was conducted in 2014 by Simon Todd. Table 5 illustrates the comparisons between the original (or initial) assessments and this amendment process.

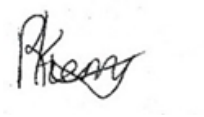
Table 5 ***Table depicting the differences between the Simon Todd 2014 findings and the current amendment findings***

Aspect	Comments and Recommendations	
	Pervious Study (Simon Todd, 2014)	**Current study**
Baseline	**Findings:** The vegetation type was deemed to be broadly homogenous with some variation due to changes in soil depth and slope position. The habitat is described as low open shrubland, with only a few SCC on site and in the surrounding environments.	**Findings:** The site was found to be largely homogenous and the findings support that the habitat represents a low open karoo shrubland. No ephemeral pans are located on the project site. However, the powerline does cross over a drainage line, which has been impacted by quarrying. The baseline environment remains as described in the 2014 study.
Sensitivity	**Findings:** The low open shrubland is of low sensitivity. One drainage area of “higher” sensitivity is present.	**Findings:** The sensitivity of the habitats are in agreement with the Simon Todd 2014 findings.
	Impacts	
Planning and Construction Phase Impacts	**Findings:** The impacts are all rated as Low Negative with mitigation.	**Findings:** The quantitative impact assessment of the current assessment are in line with the findings from Todd (2014). No new impacts have been identified.
Operation Phase Impacts	**Findings:** The avifauna impacts are all Low Negative with mitigation.	**Findings:** The quantitative impact assessment of the current assessment are in line with the findings from Todd (2014). No new impacts have been identified.
Cumulative Impacts	**Findings:** No cumulative assessment was completed, but it is noted that the contribution of the powerline to cumulative impacts would be very small or negligible.	**Findings:** The cumulative impact, evaluated in-situ considering current similar projects within the area, is rated as Low Negative with mitigations.
Conditions	**Findings:** Several conditions were provided.	**Recommendation:** Authorisation is not subject to any further conditions.

11. Conclusion

It is the opinion of the specialist that the findings from the original assessments conducted in 2014 (Simon Todd) in comparison to the assessment in 2025, appear to be appropriate and relevant with no discrepancies. The appropriate authorities may proceed with the amendment authorization.

Kind regards,



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April 2025