

**SPECIALIST AVIFAUNAL INPUT FOR THE PART 2 AMENDMENT OF THE ENVIRONMENTAL
AUTHORISATION (EA): AS PART OF THE PROTEA PHOTOVOLTAIC (PV) SOLAR POWER PROJECT
NEAR VRYBURG, IN THE NORTH WEST PROVINCE**

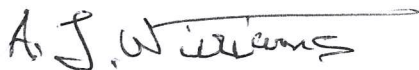
- 1 The avifaunal specialist assessment as part of the Environmental Impact Assessment (EIA) conducted for the Protea Solar Power Plant (SPP) on the remaining extent of the farm Hartsboom No. 734, Registration Division IN, North West Province (DEA ref: 14/12/1/3/3/2/914) refers.
- 2 The Solar plant is said to be tendered to the Department of Mineral Resources and Energy (DMRE) in late 2020. However, to improve the efficiency and desirability of the proposed project, the following amendments are applied for in terms of the EIA regulations 2014 (as amended in 2017)
 - **Inclusion of a battery storage system**

The battery storage facility will be kept in standard shipment containers within an area of approximately 2 ha. The batteries will be lithium-ion and no electrolytes will be transported to or handled on site. Battery cells will be assembled at the supplier's factory before delivery to the site. The battery storage facility will be located within the authorized PV plant footprint. No more than 2 ha of vegetation will be cleared for the storage facility.
 - **Increased height of panels**

To use new and advanced technology the height of the panels will be increased to ca. 6 metres
 - **Increase in the number of modules and invertors**

To increase the MWdc capacity, more invertors are needed to convert the increased capacity DC to AC.
The minimum number of invertors will be increased from 34 to 50.
The number of modules will be 370,000 each of 45 watt-peak (Wp)
 - **Amendment of the location of invertors, buildings and internal roads within the development footprint (revised layout)**

The increase in capacity (MW), with inclusion of battery storage, and the spacing between panels, requires a new layout. This has been designed with changes in the siting of infrastructure and increase in the size of demarcated areas for the associated infrastructure.
- 3 We confirm that the proposed amendments will not increase the nature or level of the impacts on avifauna as initially assessed and considered for the EIA. No changes in the significance ratings are needed. The mitigations and management actions proposed in the EIA will suffice.
- 4 We trust that you find the above in order. Feel free to contact the undersigned if there are any uncertainties, or if further information is required.



Dr A.J. Williams