



3Foxes Biodiversity Solutions
23 De Villiers Road
Kommetjie
7975

Cape Environmental Assessment Practitioners (Pty) Ltd.
17 Progress Street
George
PO Box 2070
George
6530
ATT: Dale Holder

15 August 2020

RE: PROPOSED BATTERY ENERGY STORAGE SYSTEM FOR THE AEP BLOEMSMOND SOLAR 1 ON PORTIONS 5 AND 14 OF THE FARM BLOEMSMOND 455

Cape Environmental Assessment Practitioners (Cape EAPrac) have been appointed by AEP Bloemsmond Solar 1 (Pty) Ltd. to apply for an amendment to the EA for the authorised Bloemsmond Solar 1. The applicant intends to amend the EA to make provision for a Battery Energy Storage System (BESS) within the authorised footprint, adjacent to the on-site sub-station. The applicant intends including provision for a 500 Megawatt Hour (MW/h) on approximately 4.2 hectares within the authorised footprint. As part of the amendment application, Cape EAPrac has requested input from 3Foxes Biodiversity Solutions to provide an assessment of the proposed changes in the context of the original Avifaunal Impact Assessment and to determine any novel impacts resulting from the proposed amendment. The request includes the following:

1. Whether the inclusion of a BESS adjacent to the on-site substation will change the nature or significance of any of the impacts as assessed in the original avifaunal study.
2. Whether the BESS is likely to result in any additional impacts that were not previously assessed.
3. Whether any additional management outcomes or mitigation measures would be applicable to the BESS.

1. Change in Impact Due to the Proposed Inclusion of the BESS

The avifaunal assemblage of the area is typical of the bioregion, with relatively low species richness and abundance in most years. The BESS is located adjacent to the facility substation and is within a low sensitivity area with no avifaunal habitats of concern in close proximity to the BESS. There are also no

sensitive avifaunal micro-habitats within the approved development area, with the nearest sensitive area being a large ephemeral drainage line approximately 1km to the east. There are also no known nesting or roosting sites of Red-listed species in the vicinity. The Bloemsmond 1 footprint area represents an insignificant proportion of the foraging ranges of some of the larger-bodied species of concern present in the area, such as Kori Bustard (*Ardeotis kori*), Ludwig's Bustard (*Neotis ludwigii*), Secretarybird (*Sagittarius serpentarius*) and Martial Eagle (*Polemaetus bellicosus*). The original avifaunal impacts associated with the Bloemsmond 1 facility are illustrated below in Table 1. Based on the footprint and technical specifications of the BESS as provided for this statement, there are no changes to the assessed impacts that are warranted based on the inclusion of the BESS into the Bloemsmond 1 facility.

Table 1. The pre- and post-mitigation avifaunal impacts associated with the Bloemsmond 1 facility as originally assessed and which remain applicable with the incorporation of the BESS.

Impact	Before Mitigation	After Mitigation
Habitat Destruction	High Negative	Medium Negative
Disturbance	Medium Negative	Medium Negative
Collisions with PV panels	Medium Negative	Low Negative
Use of solar infrastructure by avifauna	Medium Negative	Medium Negative

2. Potential for Novel Impacts Associated with the BESS

The BESS consists of battery storage units in closed containers with minimal potential for interaction with local avifauna. As such, the presence of the BESS would not change the nature of avifaunal impacts associated with the solar facility. As are no obvious ways in which the BESS would increase avifaunal impacts at the site, there are no additional or novel impacts on avifaunal associated with the BESS are likely to occur.

3. Additional Mitigation Measures

No additional mitigation measures or changes to the EMPr mitigation measures would be required in terms of this amendment, as no significant change to impacts or new impacts will occur. All the original avoidance and mitigation measures as indicated in the original avifaunal study are still relevant and applicable to the amended layout and must be implemented.

Conclusions and Summary Findings

- The footprint of the BESS would be entirely contained within the assessed footprint of the original Bloemsmond 1 PV facility. The affected area is classified as low sensitivity for avifauna and there are no sensitive habitats in close proximity to the BESS location that might be affected.

- The original impacts on avifauna as assessed for the Bloemsmond 1 facility are considered still applicable to the facility with the inclusion of the BESS.
- There are no novel or changed impacts associated with the inclusion of the BESS within the facility.
- The Bloemsmond 1 amendment is therefore supported in terms of avifaunal impacts. The impact of the amended layout on avifauna would be similar to the authorised layout and no changes to the assessed impacts are considered warranted.
- No additional mitigation or avoidance measures are recommended as a result of the amendment. The original mitigation and avoidance measures as included in the EIA should still be applied to the amended project.

Prepared by Eric Herrmann & Simon Todd

15 August 2020

A handwritten signature in black ink, appearing to read 'S. Todd', is positioned below the date.

Pr.Sci.Nat
SACNASP 400425/11.
