

04 February 2021

Attention: Chief Director: Integrated Environmental Authorisations
Department of Environment, Forestry and Fisheries
Environment House
473 Steve Biko Road
Arcadia

**THE BATTERY ENERGY STORAGE SYSTEM (BESS) AND ASSOCIATED INFRASTRUCTURE AT
GUNSTFONTEIN WIND ENERGY FACILITY, NORTHERN CAPE PROVINCE**

FINAL BASIC ASSESSMENT REPORT (DEFF REF: 14/12/16/3/3/1/2236)

Dear Sir/Madam,

Please find attached electronic copies of the Final Basic Assessment report, Environmental Management Programme and associated appendices for the environmental authorisation (EA) for the BESS and Associated Infrastructure for the Gunstfontein Wind Energy Facility, Northern Cape Province (DEFF Ref: 14/12/16/3/3/1/2236). These are submitted for authority decision making.

Gunstfontein Wind Farm (Pty) Ltd proposes the construction and operation of a Battery Energy Storage System (BESS) and associated infrastructure (DEFF Ref: 14/12/16/3/3/1/2236) at the authorised Gunstfontein Wind Energy Facility (DEFF Ref: 14/12/16/3/3/2/826), near Sutherland, Northern Cape Province. The project will include the development of the BESS of up to 4ha in extent to be located near to (within 500m of) the Wind Energy Facility (WEF) substation. Associated infrastructure includes MV cabling (33kV or less to be constructed underground or overhead) connecting the BESS to the authorised WEF substation, and an access road. The access road will be up to 8m in width (6m wide road surface with 1m drains either side) to allow large trucks to access the BESS. The length of the road will depend on where the BESS is micro-sited within the 500m assessment zone around the WEF substation, but will not exceed 500m. The general purpose and utilisation of a Battery Energy Storage System (BESS) is to save and store excess electrical output as it is generated, allowing for a timed release of electricity to the grid when the capacity is required. BESS systems therefore provide flexibility in the efficient operation of the electricity grid through decoupling of the energy supply and demand. The BESS is envisaged to become an integral component of the authorised WEF, allowing for the storage of energy and extension of the generation period of the WEF.

The infrastructure considered within this Basic Assessment process includes:

- » A Battery Energy Storage System (BESS) inside containers or similar housing structures with a footprint of up to 4ha in extent. Both Lithium-ion and Redox-flow technology are being considered for the project, depending on which is most feasible at the time of implementation and based on technical considerations.

- » An ~8m wide access road to the BESS (6m wide road surface with 1m drainage on each side of the road) branching off of the WEF roads, and internal roads (up to 8m wide) within the footprint of the BESS, as needed.
- » MV Cabling (underground or overhead) between the BESS and the WEF substation.
- » Fencing around the BESS for increased security measures.
- » Temporary laydown area within the 4ha footprint of the BESS.
- » Possible firebreak around the BESS facility, to be located within the 4ha BESS footprint

The BESS facility and all associated infrastructure will be located within the Remainder of Farm Gunstfontein 131, Sutherland. The affected property has been identified by the applicant as the preferred project site suitable for the development of a BESS, based on the requirement for the BESS to be located in close proximity to the approved WEF substation.

The BA report was made available for public review from 16 October 2020 – 16 November 2020. Subsequently, an extension notice was submitted in terms of Regulation 19(1)(b) of the EIA regulations, 2014 (as amended), following further layout refinements (extension notice submitted 10 December 2020).

The revised Basic Assessment report and updated layout was then made available for download, review and comment on the Savannah Environmental website: <https://www.savannahsa.com/public-documents/energy-generation/gunstfontein-wind-energy-facility/>. The 30-day review and comment period of the Revised Draft BA Report was from **11 December 2020 to 01 February 2021**.

All comments received during the public disclosure for the project has been responded to and incorporated (as applicable) in this final Basic Assessment report (and associated appendices), submitted for authority decision making.

Please note: this project has been bid under the DMRE's Risk mitigation IPP Procurement Programme (RMIPPPP), and is currently under review for Preferred Bidder Status under this programme.

Please acknowledge receipt of this Final Basic Assessment report, EMPr and associated appendices in writing. Please do not hesitate to contact me if you have any queries in this regard.

Yours sincerely

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