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Savannah Environmental (Pty) Ltd Care of Lisa Opperman

Per email: Lisa.o@savannahsa.com

Dear Lisa

Vryburg Solar 3 (Pty) Ltd Vryburg Solar 3 Part 2 Amendment, North West Province

ADDENDUM

This letter serves as an addendum to the original Visual Impact Assessment (VIA) report for the Proposed 115MW Solar Photovoltaic Facility (Vryburg Solar 3) and associated infrastructure.

Vryburg Solar 3 (Pty) Ltd is proposing the construction and operation of a Battery Energy Storage System (BESS) for the authorised Vryburg Solar 3 Energy Facility, with a capacity of up to 500MW/500MWh into the project description of the Environmental Authorisation (EA). The BESS which will have an extent of no more than 5ha will be developed within the authorised development footprint of Vryburg Solar 3, within the authorised 15ha construction compound/laydown area. The BESS will connect to the authorised on-site facility substation of Vryburg Solar 3 Facility via underground cables. The project is located within the Vryburg Renewable Energy Development Zone (REDZ), within ward 4 of the Naledi Local Municipality and within the greater Dr Ruth Segomotsi Mompati District Municipality in the North West Province 10km south-west of Vryburg. The authorised solar energy facility and associated infrastructure will be located on the following farm portions:

- Portion 1 of Retreat Farm 671;
- Portion 2 of Frankfort Farm 672;
- Remaining extent of Frankfort Farm 672;
- Portion 1 of Frankfort Number Farm 672; and
- The Remainder of Rosendal Farm 673.

The BESS will be located on Portion 1 of Retreat Farm 671.

The 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 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 following infrastructure is associated with the BESS:

- Electrochemical battery storage systems with a maximum height of 3.5m; and
- Multi-core 22kV or 33kV underground cables, to follow internal access roads of the PV facility, to connect the battery storage area to the on-site facility substation.

In addition, Vryburg Solar 3 (Pty) Ltd is also proposing a change in the description included in the Environmental Authorisation pertaining to the on-site substation. The change relates to the addition of collector infrastructure as part of the authorised on-site substation and within the authorised footprint of the substation.

It is the Developer's intention to bid the solar PV facility and the battery energy storage under the Risk Mitigation Independent Power Producer (IPP) Procurement Programme and/or Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) of the Department of Mineral Resources and Energy and/or any future relevant procurement programme. Ultimately, the development of the solar PV facility as well as the battery energy storage is intended to be part of the renewable energy projects portfolio for South Africa, as contemplated in the Integrated Resources Plan (IRP).

CONCLUSION AND RECOMMENDATIONS

The addition of the BESS is not expected to significantly alter the area of potential visual exposure and is therefore **not expected to significantly alter** the influence of the Solar Energy Facility (SEF) on *areas of higher viewer incidence* (observers traveling along the national, arterial/main, or major secondary roads within the region) or *potential sensitive visual receptors* (residents of homesteads in close proximity to the SEF).

In consideration of the proposed addition of the BESS, and the change in the description included in the EA pertaining to the on-site substation, there is no (zero) change to the significance rating compared with the original Environmental Impact Assessment (EIA) VIA report and no additional visual impacts are envisaged. In addition to this, no new mitigation measures are required.

The proposed amendments are expected to have a neutral effect from a visual impact perspective i.e. no advantages or disadvantages are expected.

It is therefore suggested that the proposed amendments allowing for the addition of the BESS, and the change in the description included in the EA pertaining to the on-site substation be supported, subject to the conditions and recommendations as stipulated in the original Environmental Authorisation, and according to the Environmental Management Programme and suggested mitigation measures, as provided in the original VIA report.

Feel free to contact me at any time, should you have any queries.

Kind regards,

Lourens du Plessis (PrGISc)

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