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Savannah Environmental (Pty) Ltd

Care of Jo-Anne Thomas

Per email: Joanne@savannahsa.com

Dear Jo-Anne

Genesis Zonnequa Wind (Pty) Ltd
Proposed Grid Connection Infrastructure for the Zonnequa Wind Farm,
Northern Cape Province
Part 2 Amendment

ADDENDUM

This letter serves as an addendum to the original Visual Impact Assessment (VIA) report for the Proposed Zonnequa Wind Farm Grid Connection Infrastructure in the Northern Cape Province.

BACKGROUND

Genesis Zonnequa Wind (Pty) Ltd proposes the construction and operation of a grid connection solution for the proposed Zonnequa Wind Farm, near Kleinsee, Northern Cape Province. The grid connection solution will include the development of a double-circuit 132kV power line (known as the Strandveld-Gromis 132kV double-circuit power line) and collector substation (known as the Strandveld Substation) to connect the proposed Zonnequa Wind Farm to the national grid. Other associated infrastructure will also be required for the grid connection solution, including access tracks/roads, administrative buildings and laydown areas.

A corridor 300m wide and 22km long is being assessed to allow for the optimisation of the grid and associated infrastructure and to accommodate environmental sensitivities. The grid infrastructure will be developed within the 300m corridor. The height of the power line pylons will be up to 32m and the servitude width of the power line will be 31m. The extent of the Strandveld Substation will be $100 \, \text{m} \times 200 \, \text{m}$ and the capacity of the substation will be $132 \, \text{kV}$. Three grid connection options exist within the $300 \, \text{m}$ corridor, namely:

- A direct connection from the Strandveld Substation to the existing Gromis Substation located ~18km from the northern boundary of the Zonnequa Wind Farm project site. This is considered to be the preferred option from a technical perspective due to the fact that the Gromis Substation already exists.
- A loop-in loop-out connection from the Strandveld Substation to the proposed Rooivlei-Gromis 132kV double-circuit power line which forms part of the Namas Wind Farm grid connection solution. The proposed Rooivlei-Gromis 132kV double circuit power line is located ~800m to the east of the Strandveld substation. This option is only viable should the Namas Wind Farm be developed.
- A direct connection from the Strandveld Substation to the proposed collector substation (known
 as the Rooivlei Substation) which forms part of the Namas Wind Farm grid connection solution.
 The Rooivlei Substation is located ~7km south of the Strandveld Substation. This option is only

viable should the Namas Wind Farm be developed.

Grid Environmental Authorisations (EAs) Part 2 Amendments

- Amendment of the co-ordinates of the substation/switching station positions to be in line with the amended Facility EAs.
- Amendment of the corridor width from the authorised 300m to 600m (to be 300m east and
 west of the 400kV line). AEP only catered for a 300m grid corridor to the west of the
 planned 400kV line, whereas all indications are that Eskom might want them to construct the
 132kV line/s to the east of the 400kV line.
- The corridor/envelope around Gromis Main Transmission Substation (MTS) to be expanded
 to allow entry to the 132kV yard from the north. At the moment the corridor doesn't allow
 for much movement into Gromis MTS.

CONCLUSION AND RECOMMENDATIONS

There will be no significant change to the development footprints or dimensions of the infrastructure associated with any of the above amendments.

The amendments will not alter the area of potential visual exposure and is therefore **not expected to alter** the influence of the grid connection infrastructure 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 grid connection infrastructure).

In consideration of the proposed amendments, there are no (zero) changes to the significance ratings compared with the original Environmental Impact Assessment (EIA) VIA reports 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 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 reports.

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

Kind regards.

Lourens du Plessis (PrGISc)