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Savannah Environmental (Pty) Ltd
Care of Jo-Anne Thomas

Per email: Joanne@savannahsa.com

Dear Jo-Anne

PART 1 AMENDMENT: VISUAL ASSESSMENT

Proposed Karoshoek Grid Integration Infrastructure, Northern Cape Province

1. PROJECT TITLE

Establishment of the Upilanga (Karoshoek) Grid Integration Infrastructure i.e. on-site substation/switching yard and 400kV powerline from site 1.4, 3, 4, and 5 to the future Eskom MTS 400kV power line proposed to the west of the site, as part of the larger Karoshoek Solar Valley Development, 30km east of Upington, within the Khara Hais Local Municipality in the Northern Cape Province.

2. BACKGROUND AND PURPOSE OF THE AMENDMENT

Government Notice 779 of 1 July 2016 identifies the Minister of Forestry, Fisheries and the Environment as the Competent Authority for activities in terms of section 24(2) (a), which may not commence without environmental authorisation, and which relates to the Integrated Resources Plan (IRP) 2010-2030 and any updates thereto. As the amendment to the environmental authorisation for this application relates to the authorised grid connection for the Karoshoek Solar Valley facilities which is related to the IRP (and was originally authorised by the DFFE), the Minister of Forestry, Fisheries and the Environment (i.e. DFFE) is the Competent Authority.

Condition 6 of the EA states that the activity must commence within a period of three (3) years from the date of issue. The Environmental Authorisation (EA) for the project was issued on 20 March 2013. The validity of the EA was extended for an additional two years on 11 November 2015 (DEA Ref: 14/12/16/3/3/2/288/AM1) and by an additional 5 years on 11 April 2018 will lapse on 20 March 2023. FG Emvelo requests an extension of the validity of the EA by an additional ten years.

Condition 6 of the EA is requested to be amended from *"This activity must commence within a period of three (3) years from the date of issue"* to *"This activity must commence within a period of twenty (20) years from the date of issue"*.

3. ASSESSMENT OF THE PROPOSED AMENDMENT

The reviewer has assessed the proposed amendment to the extension of the validity of the EA and has drawn the following conclusions:

3.1. The Affected Environment

The description of the affected environment, as described in the original VIA report remains unchanged. There have been no change in land use for the proposed development site, no new developments have been constructed on or near the development site, and the land use zonation (agriculture) remains the same.

The above conclusion was verified through consultation with the project proponent and the current land owner(s), as well as during the undertaking of the Visual Impact Assessment for the Uppington Ilanga Solar Park 100MW Photovoltaic 1 Power Plant in 2020.

3.2. Terms of reference for the VIA

The terms of reference for the original VIA report included:

- Determine the potential visual exposure of the proposed project infrastructure
- Determine the visual distance/observer proximity to the project infrastructure
- Identify potential sensitive visual receptors and areas of higher viewer incidence
- Determine the visual absorption capacity of the landscape
- Calculate a visual impact index to identify the magnitude of the visual impact on potentially affected areas/receptors
- Determine the significance of the potential visual impact
- Provide mitigation measures to alleviate the potential visual impacts

These activities, analyses and conclusions are still relevant in light of the proposed amendment to the extension of the validity of the EA.

3.3. Impact rating assessment and impact mitigation measures

The proposed extension of the validity of the EA by an additional ten years is not expected to alter the influence of the project infrastructure on *areas of higher viewer incidence* (observers traveling along the roads within the region) or *potential sensitive visual receptors* (residents of homesteads in closer proximity to the infrastructure).

The proposed amendment to the validity of the EA is consequently not expected to influence the anticipated visual impact, as stated in the original VIA report (i.e. the visual impact is expected to occur regardless of the amendment). This statement relates specifically to the assessment of the visual impact within a 0.5km radius of the grid connection structures (potentially *high* significance), but also generally apply to potentially *moderate* to *low* visual impacts at distances of up to 3km from the structures.

From a visual perspective, the proposed amendment will therefore require no (zero) changes to the significance rating within the original visual impact assessment report that was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

There are no new assessment guidelines which are now relevant to the authorised development which were not undertaken as part of the initial visual impact assessment. Additional to this, and as stated above, there have been no changes to the environment of the proposed development site or the surrounding environment.

3.4. Cumulative visual impact

It is worth noting that the proposed Grid Connection Infrastructure is located within the Upington Renewable Energy Development Zone No. 7 (REDZ7) as determined by the *Strategic Environmental Assessment for Wind and Solar Photovoltaic Energy in South Africa* (2015 – CSIR/DEA) and within the Northern Corridor of the Strategic Transmission Corridors.

REDZ are described as:

“areas where large scale wind and solar PV energy facilities can be developed in terms of SIP 8 and in a manner that limits significant negative impacts on the environment, while yielding the highest possible socio-economic benefits to the country.”

Strategic Transmission Corridors are:

“areas where long term electricity grid infrastructure will be developed and where an integrated decision-making process for applications for environmental authorisation in terms of the National Environmental Act (1998) will be followed.”

The consolidation and concentration of renewable energy facilities (and associated grid connection infrastructure) within these zones are therefore preferred and the cumulative visual impact is deemed to be of an acceptable level i.e. the amendment is not expected to alter the potential cumulative visual impact rating as stated in the original VIA report.

4. CONCLUSION AND RECOMMENDATIONS

The proposed amendment will require no changes to the impact significance ratings as stated within the original VIA report which was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

It is suggested that the amendment to the validity of the EA be supported, subject to the conditions and recommendations as stipulated in the original EA, and according to the Environmental Management Programme (EMPr) and suggested mitigation measures, as provided in the original VIA report.

5. REFERENCES

https://www.dffe.gov.za/sites/default/files/gazetted_notices/Nema107of1998_electricitygridinfrastructuredevelopmentactivities_n113.pdf

<https://redzs.csir.co.za>

LOGIS, 2020. Proposed Upington Ilanga Solar Park – 100MW Photovoltaic 1 Power Plant. *Northern Cape Province - Visual Impact Assessment Report*.

MetroGIS (Pty) Ltd, 2012. Proposed Karoshoek Solar Valley Development near Upington. *Northern Cape Province - Visual Impact Assessment Report*.

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

Kind regards.

A handwritten signature in black ink, appearing to read 'L. du P.' with a stylized flourish.

Lourens du Plessis (PrGISc)