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STATEMENT OF CONFIRMATION OF AGRICULTURAL ASSESSMENT OF MULILO TOTAL HYDRA STORAGE PROJECT - GRID INTERCONNECTION

It is hereby confirmed that in my agricultural assessment, *Agricultural and Soils Impact Assessment for Proposed De Aar 2 South Grid Connection Routes in Northern Cape Province,* dated December 2020, I fully assessed the Mulilo Total Hydra Storage Project - Grid Interconnection. This included a 200 metre wide corridor for ±8km of single circuit 132 kV overhead powerline, between the Hydra MTS and Mulilo Total Hydra Storage Project. It also included a switching substation and an access road.

1 SHORT SUMMARY OF RECEIVING ENVIRONMENT

The aridity of the area is a significant agricultural constraint that seriously limits the level of agricultural production (including grazing) possible across the site. Shallow soils on underlying rock or carbonate hardpan are a further agricultural limitation. As a result of these limitations, the study area is unsuitable for cultivation and agricultural land use is limited to low density grazing.

2 DEFF SCREENING TOOL SITE SENSITIVITY VERIFICATION

The proposed site is identified by the screening tool as being of low and medium sensitivity for impacts on agricultural resources (see Figure 1). The agricultural sensitivity, as identified by the screening tool, is confirmed by this assessment. The motivation for confirming the sensitivity is predominantly that the climate data (low rainfall and high evaporation) proves the area to be arid, and therefore of limited land capability. In addition, the land type data shows the dominant soils to be shallow soils on underlying rock or hard-pan carbonate. The land of the study area, therefore, without doubt, corresponds to the definitions of the screening tool sensitivity categories of low and medium in terms of its land capability and cultivation status.

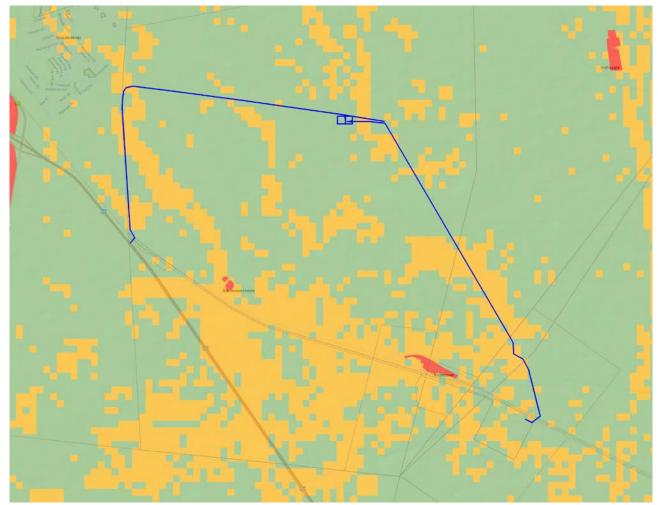


Figure 1. The proposed development, showing the switching substation, the access road from the west, and the power line corridor from the south east, overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high).

3 AGRICULTURAL IMPACT

The proposed development has negligible impact on agriculture in this environment for two reasons:

- 1. Overhead transmission lines have no agricultural impact because all agricultural activities that are viable in this environment (grazing) can continue completely unhindered underneath transmission lines.
- 2. The direct, permanent, physical footprint of the development that has any potential to interfere with agriculture, is restricted to pylon bases and a small substation that, in the context of the agricultural environment of low density grazing on farms which are typically thousands of hectares large, is entirely insignificant.

The only possible source of impact is minimal disturbance to the land during construction and decommissioning. The single agricultural impact is therefore minimal soil and land degradation (erosion and topsoil loss) as a result of land disturbance.

4 MITIGATION

There are no additional mitigation measures required, over and above what has already been included in the Generic EMPr for overhead electricity transmission and distribution infrastructure as per Government Notice 435, which was published in Government Gazette 42323 on 22 March 2019.

5 **CONCLUSION**

The conclusion of this assessment is that the proposed development will not have an unacceptable negative impact on the agricultural production capability of the site. The proposed development is therefore acceptable. This is substantiated by the facts that the land is of very low agricultural potential, the amount of agricultural land loss is insignificant, and that the proposed development poses a low risk in terms of causing soil degradation. From an agricultural impact point of view, it is recommended that the development be approved.