## Johann Lanz

Soil Scientist (Pr.Sci.Nat.) Reg. no. 400268/12 Cell: 082 927 9018 e-mail: johann@johannlanz.co.za 1A Wolfe Street Wynberg 7800 Cape Town South Africa

## BRANDVALLEY POWER LINE: AGRICULTURAL ASSESSMENT OF LAYOUT AND EMPR

The purpose of this specialist input is to assess the acceptability of the power line layout, and to assess the adequacy of the EMPr, both in terms of the project's impacts on agricultural resources.

The objective and focus of an agricultural assessment for Environmental Authorisation is to assess whether or not a proposed development will have an unacceptable agricultural impact or not, and based on this, to make a recommendation on whether it should be approved or not. Agricultural impacts are done in terms of the protocol for the specialist assessment and minimum report content requirements of environmental impacts on agricultural resources. The aim of this protocol is to preserve valuable agricultural land for agricultural production. Valuable land is considered to be predominantly scarce arable land that is suitable for the viable production of cultivated crops.

The focus and defining question of an agricultural impact assessment is to determine to what extent a proposed development will compromise (negative impacts) or enhance (positive impacts) current and/or potential future agricultural production. The significance of an impact is therefore a direct function of the degree to which that impact will affect current or potential future agricultural production. If there will be no impact on production, then there is no agricultural impact. Impacts that degrade the agricultural resource base, pose a threat to production and therefore are within the scope of an agricultural impact assessment.

Electrical grid infrastructure has negligible agricultural impact in this environment for three reasons:

- 1. Overhead transmission lines have no agricultural impact because all agricultural activities that are viable in this environment, 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 entirely insignificant within this agricultural environment.
- 3. The affected land has very low agricultural potential, anyway.

The only possible source of impact is minimal disturbance to the land during construction and decommissioning.

A map of the substation and power line route, overlaid on the screening tool sensitivity, is given in Figure 1. The route is almost entirely on land of low agricultural sensitivity and hence of very low agricultural potential.



**Figure 1.** The proposed power line and substation overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high).

Because the proposed power line has negligible agricultural impact, the proposed layout is entirely acceptable in terms of agricultural impact.