MetroGIS

www.metrogis.co.za

+27 12 349 2884/5
+27 12 349 2880
mgis@metrogis.co.za
PO Box 384
La Montagne
0184
South Africa
CSIR, Room 224, Building 8
Meiring Naudé Rd
Brummeria, Pretoria
Lat: -25.747601° Lon: 28.275650° (CSIR Visitors' Reception)

5 November 2012

PROPOSED SERE WIND ENERGY FACILITY (WESTERN CAPE PROVINCE)
AMENDMENT TO THE ENVIRONMENTAL AUTHORISATION (EA)

VISUAL IMPACT STATEMENT

Dear Sir/Madam

INTRODUCTION

The Sebata Institute appointed MetroGIS (Pty) Ltd as an independent specialist consultant to investigate the potential visual impact, or alternately the mitigation of potential visual impact, of the proposed amendment to the wind turbine infrastructure.

Lourens du Plessis from MetroGIS (Pty) Ltd undertook the investigation in his capacity as a visual assessment and Geographic Information Systems specialist. Lourens has been involved in the application of Geographical Information Systems (GIS) in Environmental Planning and Management since 1990. He has extensive practical knowledge in spatial analysis, environmental modelling and digital mapping, and applies this knowledge in various scientific fields and disciplines. His GIS expertise are often utilised in Environmental Impact Assessments, State of the Environment Reports and Environmental Management Plans.

Lourens is familiar with the "Guidelines for Involving Visual and Aesthetic Specialists in EIA Processes" (Provincial Government of the Western Cape: Department of Environmental Affairs and Development Planning) and utilise the principles and recommendations stated therein to successfully undertake visual impact assessments. Neither the author, nor MetroGIS will benefit from the outcome of the project decision-making.

RESULTS/FINDINGS

MetroGIS formed part of a team of specialists involved with the original Environmental Impact Assessments for the Sere Wind Energy Facility (WEF) undertaken in 2008. The authorised WEF has since successfully submitted two EA amendments, the first on the 29th of October 2010 and the second on the 29th of August 2011.

The latter amendment introduced the construction of 67 wind turbine generators (120m hub-height) with a 90m diameter rotor (3 x 45m blades) as apposed to the former amendment of 100 wind turbines with similar dimensions.

This third and latest EA amendment proposes the construction of a maximum of 50 wind turbine generators (120m hub-height), each fitted with three 53m blades (i.e. approximately 106m diameter rotor). The following deductions are relevant to this amendment:

- There will be a reduction of up to 17 wind turbines (25% less) in the general layout of the facility. This is bound to reduce the frequency of potential visual exposure of the turbines and subsequently mitigate the potential visual impact to some degree.

- The wind turbine blades are expected to be marginally longer (approximately 15% longer). This increase in length is not expected to greatly influence the general appearance of the wind turbine structures, as it is very difficult to scale the dimensions of the turbines, especially in the absence of other structures (e.g. tall buildings).

In light of the above findings, we do not expect the proposed amendment (to the wind turbine infrastructure) to **significantly** alter the outcome of the potential visual impacts associated with the original WEF application, as stated in the original VIA report.

We further state that the potential visual impacts associated with the proposed EA amendment should not alter/influence the outcome of the project decision-making, and generally recommend that the application be supported.

Kind regards.

Lourens du Plessis (PrGISc)
Director: MetroGIS (Pty) Ltd