

Simon Todd Pr.Sci.Nat Director & Principle Scientist C: 082 3326502 O: 021 782 0377 Simon.Todd@3foxes.co.za

60 Forrest Way Glencairn 7975

3Foxes Biodiversity Solutions 60 Forrest Way Glencairn 7975

Savannah Environmental (Pty) Ltd P.O. Box 148 Sunninghill 2157 Tel. 011 656 3237

Att: **Jo-Anne Thomas** 

10 March 2019

## RE: Amendment Application for the Witberg Wind Energy Facility DEA ref. 12/12/20/1966/AM6

This statement letter is in reference to the authorized Witberg Wind Energy Facility (WEF) and the request by Savannah Environmental for comment on the ecological implications of the proposed changes to the layout and turbine specifications that would be included in the Amendment. Witberg Wind Power (Pty) Ltd is proposing to amend the EA as follows:

- » Turbine specifications for the Witberg WEF to be changed as follows:
  - o Range of Rotor diameter: From 116m, to up to 136m;
  - o Range of Hub height: From 92m, to up to 120m; and
  - o Range of Wind turbine capacity: From 3MW, to up to 5MW.;
- » Wind Farm layout is to be re-positioned;
- » Number of wind turbines to be reduced to 25;
- » Change in contact details of the holder of the EA;
- » Correct minor spelling errors of approved listed activities;
- » Extend the validity of the EA by an additional two (2) years; and
- Amendment of Condition 40 as per additional conditions to be added to the EA in the amendment of the EA (Ref: LSA 105-439) to refer to Witberg Wind Power (Pty) Ltd instead of G7;

Savannah Environmental have requested confirmation regarding the assessed terrestrial ecological impacts in terms of the following:

- 1. An assessment of all impacts related to the proposed changes;
- 2. Advantages and disadvantages associated with the changes;
- 3. Comparative assessment of the impacts before the changes and after the changes; and
- 4. Measures to ensure avoidance, management and mitigation of impacts associated with such proposed changes, and any changes to the EMPr.

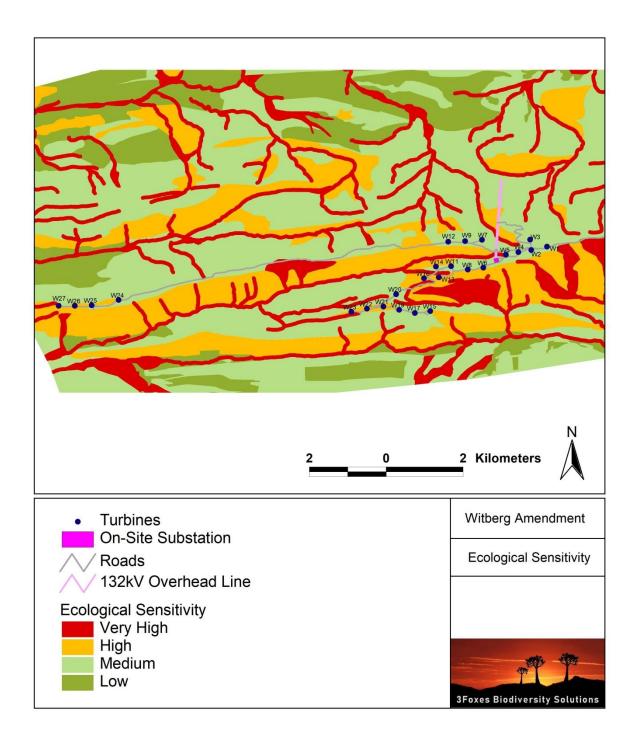
The assessment must be clear on whether each of the proposed changes to the EA will:

- 1. Increase the significance of impacts originally identified in the EIA report or lead to any additional impacts; or
- 2. Have a zero or negligible effect on the significance of impacts identified in the EIA report; or Lead to a reduction in any of the identified impacts in the EIA report.

## 1. Change in Impact Due to Proposed Amended Layout

I have reviewed the amended layout in reference to both the previously amended and approved layout as well as the ecological sensitivity of the site. The previous layout consisted of 27 turbines while the current proposed amended layout this has been reduced to 25 turbines. The amendment includes increasing the size and output of the turbines and in terms of impacts on terrestrial ecology, this would not be likely to generate any additional impacts or noticeably increase any previously assessed impacts. The increase in the size of the turbines is offset by the reduction in the number of turbines. As such, the change in the turbine number and specifications is not considered to have material additional or reduced impact on terrestrial ecology and as such, no changes to the previously assessed impacts are recommended as a result of the changes to the turbines.

The amendment includes some changes to the layout including the repositioning of some of the turbines. While the majority of turbines are in close proximity to their original positions, with minimal potential change in impact, three turbines have been lost from the east of the site and repositioned on ridges to the west. The revised positions have been interrogated and found to be within acceptable positions where their impact is likely to be similar as the previous positions and no additional impact can be anticipated as a result of the changes. Consequently, there is no change to the assessed impacts as a result of the change in turbine positions. The additional changes to the layout such as access roads, power line, construction camp and substation position, have also been reviewed and no changes to the impact of the development on terrestrial ecological features were found to have occurred. As such, it is concluded that the change to the layout of the development has not had an impact on the previously assessed impacts associated with the development.



**Figure 1.** The ecological sensitivity map of the Witberg site and the 25-turbine layout as provided for the current assessment.

Although, no additional impacts are likely to occur as a result of the amendment, it should be noted that the effected environment is considered sensitive and a variety of plant species of high conservation concern are known from the immediate area. As previously noted and reiterated here, the need for a preconstruction walk-through of the entire development footprint with local adjustment to the routing of access roads and micro-siting of turbines where deemed necessary should occur should the development proceed to construction. A pre-construction walk-though of the facility would also be required in order to comply with the permit conditions for the development as a variety of protected species may be impacted and a permit from CapeNature would thus be required.

Since the original study was conducted in 2010, there is some potential for the receiving environment to have changed in the intervening period till now. However, conditions at the time of the original assessment were very favourable and the fynbos vegetation in the development area was mature and well-developed. As a result, the original assessment is considered to provide a good characterization of the receiving environment, which would not have changed significantly since the original sample period. In addition, there has not been significant additional transformation or habitat loss in the immediate environment of the wind farm, with the result that cumulative impacts associated with the development are not likely to have changed significantly since the original assessment.

In terms of cumulative impact, the amendment would not increase cumulative impacts as compared to the original assessment as the footprint has decreased from the original assessed footprint. In addition, there are not any new renewable energy facilities in the immediate area and the wind energy facilities in the wider area, which includes those facilities both in the Tanqua Karoo near Touwsrivier as well as the facilities in the Roggeveld are within a different receiving environment from the current facility, and are not considered to occupy the same environment and hence do not significantly contribute to cumulative impact on the Witberg system. As such, the amendment is considered acceptable in terms of cumulative impact.

In response to the current amendment, Western Cape DEADP provided several suggested amendments to the EMPr. These are also supported here and the suggested mitigation and vegetation clearing protocols suggested by DEADP should be included into the EMPr as far as possible.

CapeNature has also requested comment on the amendment in terms of the 2017 WCBSP layer. In terms of this layer there are no CBA1 or CBA 2 areas within the development footprint. The drainage features of the site are classified as Ecological Support Areas and as these areas are classified as Very High sensitivity, impact on these features would be minimal and provided that erosion and other impacts on the site are adequately mitigated, then impact on the functioning of the ESAs would be low. In terms of CapeNature Land Use Advice (LUA) Handbook, the development of a wind farm is compatible with areas that are classified as Other Natural Areas. Although there are some stewardship sites in the broader vicinity of the site, these are more than 1.5km away from the turbines and direct impact on terrestrial fauna and flora within these areas is not likely.

## 2. Conclusions & Summary Findings

- The findings of this statement are contingent on the layout as provided for the assessment. There are a variety of sensitive and threatened species at the site which are vulnerable to impact and which can be affected by changes to the development layout.
- Should the development proceed to construction, the final development footprint should be subject to a pre-construction walk-through to inform the final placement of roads and turbines as well as locate and identify species of conservation concern that are within the development footprint. Some search and rescue of plant species of conservation concern may be required.
- The Witberg Amended layout is supported in terms of terrestrial ecology impacts as it will not result in an increase in the significance in any of the assessed ecological impacts and is not considered substantially different from the previous 27 turbine layout.

Prepared by Simon Todd

Director

**3Foxes Biodiversity Solutions** 

10 March 2019

Pr.Sci.Nat

SACNASP 400425/11.