3Foxes Biodiversity Solutions
ECOLOGICAL SPECIALIST SERVICES
Assessment/Management/Research

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

23 De Villiers Road
Kommetjie
7975

Ecological Solutions for People & the Environment

3Foxes Biodiversity Solutions
23 De Villiers Road
Kommetjie
7975
23 April 2021

ATT: Jo-Anne Thomas
Savannah Environmental

RE: Zonnequa WEF Grid Connection Amendment Application

Atlantic Energy Partners is proposing to amend various component and aspects of the approved Grid Connection for the Zonnequa Wind Energy Facility (WEF), located near Kleinsee in the Northern Cape. As part of the amendment process, Savannah Environmental has requested comment from 3Foxes Biodiversity Solutions regarding the potential terrestrial biodiversity implications of the proposed changes, which are detailed below.

Scope & Background to the Amendment

Atlantic Energy Partners are proposing the following changes to the Zonnequa Grid Corridor and substation.

1. Amendment of the co-ordinates of the substation/ switching station positions to be in line with the amended Facility EAs.
2. Amendment of the corridor width from the authorised 300m to 600m (to be 300m east and west of the 400 kV line). The assessed grid corridor only catered for a 300m grid corridor to the west of the planned 400kV line, whereas indications are that Eskom may want the 132 kV line/s to be constructed to the east of the 400 kV line.
3. The corridor/ envelope around Gromis MTS to be expanded to allow entry to the 132 kV yard from the north. At the moment the corridor doesn't allow for much movement into Gromis MTS.

In order to address the above proposed changes to the authorised layout of the development, this amendment statement letter provides an evaluation of the ecological impacts associated with the development in regards to the following:

1. An assessment of all impacts related to the proposed change, including a comparison with those impacts predicted in the EIA.

2. Advantages and disadvantages associated with the proposed change
3. Measures to ensure avoidance, management and mitigation of impacts associated with the proposed change
4. Any changes to the EMPr

1. An assessment of all impacts related to the proposed change, including a comparison with those impacts predicted in the EIA.

A summary assessment of the original impacts as assessed in the fauna and flora specialist report for the Zonnequa Grid BA and the new grid corridor is listed below in Table 1. There are no changes in the overall post-mitigation impacts associated with the change in corridor width and substation location. This is because there are no new or additional sensitive features within the amended grid corridor and substation location that were not present within the original corridor. As such, the amendment does not result in an overall increase in the impacts as assessed.

Table 1. Summary of the original pre- and post-mitigation significance of impacts associated with the original Zonnequa grid corridor and the amended grid corridor.

Impact	**Original Grid Corridor**		**Amended Grid Corridor**	
	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
Construction Phase				
Impacts on vegetation and plant SCC	Medium	Low	Medium	Low
Direct and indirect faunal impacts	Low	Low	Low	Low
Increased Erosion Risk	Medium	Low	Medium	Low
Operational Phase				
Direct and indirect faunal impacts	Low	Low	Low	Low
Impact on CBAs and broad-scale ecological processes	Low	Low	Low	Low
Increased Erosion Risk	Medium	Low	Medium	Low
Decommissioning Phase				
Direct and indirect faunal impacts	Low	Low	Low	Low
Increased soil erosion	Medium	Low	Medium	Low
Cumulative Impacts				
Cumulative habitat loss and impact on broad-scale ecological processes.	Low	Low	Low	Low

2. Advantages and disadvantages associated with the proposed change

The existing sensitivity map for the Zonnekwa grid corridor was for a 300m corridor and the amendment includes a 600m wide corridor. In order to address this change, the original sensitivity

map was expanded to include the additional corridor width. The expanded sensitivity map is illustrated below in Figure 1. The features within the expanded corridor are similar to those within the original corridor, indicating that if the line routing was to be switched to the east of the 400kV line, impacts would be similar to the existing route and there are no new or additional features that may be impacted by the change. Overall, there are no significant advantages or disadvantages of the changes that would affect the impacts of the line as assessed.

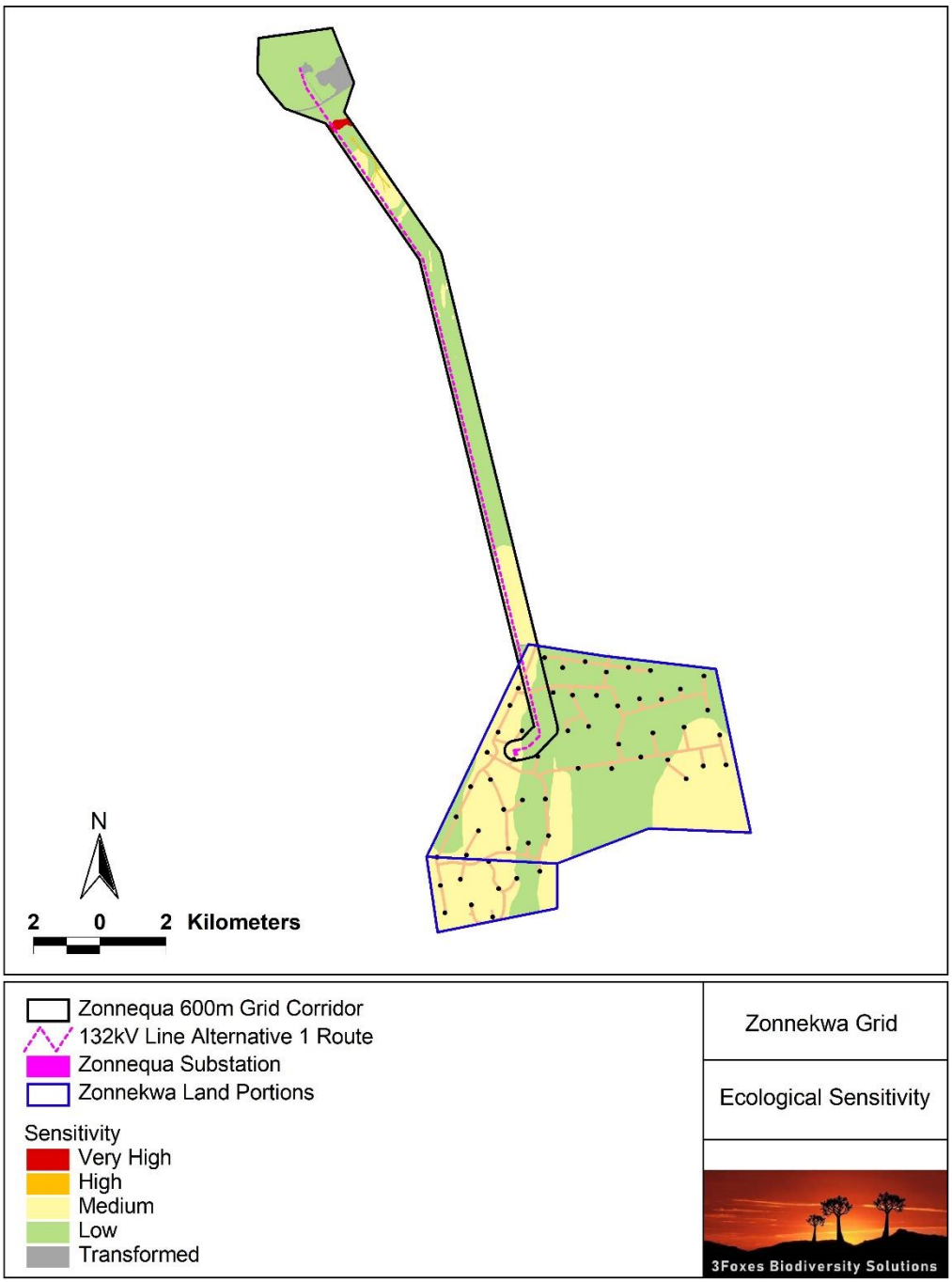

Figure 1. The revised sensitivity map for the Zonnequa Grid Corridor, illustrating the amended 600m wide corridor.

3. **Measures to ensure avoidance, management and mitigation of impacts associated with the proposed change**

The amended layout of the Zonnequa grid connection and associated infrastructure are located in similar areas to the original footprint and there are no High or Very High sensitivity areas which cannot be avoided, which is in-line with the recommendations of the original BA study. As such, there are no additional changes to the mitigation and avoidance measures that were recommended and in the grid BA study. In addition, the cumulative impacts associated with the amendment are considered to be the same as those as assessed in the BA and thus there would no changes to the overall cumulative impacts associated with the change to the grid connection. All of the mitigation and avoidance measures as recommended in the BA are held up by the current study and should be applicable to the amended layouts as well.

4. **Any changes to the EMPr**

There are no recommended changes to the EMPr and all of the mitigation and avoidance measures as recommended in the BA are applicable to the amended layouts.

Conclusions and Recommendations

The amendment includes the expansion of the assessed grid corridor width from 300m to 600mas well as changes to the substation location and substation access angles. As the overall footprint of the amendment would be the same as for the original grid route and there are no novel sensitive features within the additional expanded grid corridor area, the proposed changes would not increase the assessed impacts associated with the development. The change in corridor width and substation locations would not increase cumulative impacts associated with the development. No additional mitigation or avoidance measures, beyond those already recommended in the BA study are required for the amendment. As such, there are no reasons to oppose the proposed amendment and it can therefore be supported from an ecological point of view.

Sincerely

Simon Todd
Director
3Foxes Biodiversity Solutions