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Amendments to the turbine specifications of turbines 4, 8, 15 and 16 for the Springbok Wind Energy Facility, and the impacts on bats

Animalia Consultants (Pty) Ltd) completed the 12 months pre-construction bat monitoring for the Springbok Wind Energy Facility (WEF), near Springbok. An addendum report was compiled in February (revised in March 2017) to address the implications of proposed increased turbine dimensions.

Due to potential avifaunal impacts on birds, the turbines 4, 8, 15 and 16 are currently proposed to be decreased in size with hub height from 140m to 105m but with the rotor diameter remaining at 160m. This will result in the lowest rotor swept point to be 25m from ground level, which is lower than usual and might significantly impact the portion of bats utilising the lower airspaces. The high flying Free-tailed bats that dominated the site also showed a high abundance at lower heights above ground.

This expected increased impact on bats, results in turbines 4, 8, 15 and 16 to require more stringent mitigation measures imposed on them. The mitigations of the March 2017 addendum report remain valid and unchanged. In the case of turbines 4 and 15, which is also included in the mitigations of the March 2017 addendum report, the mitigations indicated in **Table 1** below will take preference and will overwrite the addendum report mitigations.

Therefore, for turbines 4, 8, 15 and 16, the mitigation schedule in **Table 1** is recommended to be implemented from the onset of operation. The mitigation schedule table below is based on the passive data collected. They infer mitigation be applied during the peak activity periods and times, and when the advised wind speed (measured at nacelle height) and temperature ranges are prevailing simultaneously. It considering conditions in which 85% of bat activity occurred.

Table 1: The recommended mitigation schedule for turbines 4, 8, 15 and 16.

Terms of mitigation implementation	
Peak activity (times to implement curtailment/ mitigation)	10 September – 25 October over the period of sunset to 06:00
Environmental conditions in which to implement curtailment/ mitigation	Wind speed below 6.0m/s and Temperature above 10°C
Autumn peak activity (times to implement curtailment/ mitigation)	15 January – 1 February over the period of sunset to 05:30
Environmental conditions in which to implement curtailment/ mitigation	Wind speed below 4.5m/s and Temperature above 16°C

The proposed amendments are acceptable from a bat sensitivity perspective if the recommended mitigation measures are adhered to.

If there are any queries, please do not hesitate to contact me.



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