

Appendix K

# Consideration of Impacts to Mallee Cliffs National Park

## K.1 Introduction

This appendix addresses the impacts of the Mallee Wind Farm Project (the Project) on Mallee Cliffs National Park. This section replaces the assessment previously provided in Section 7.3.5 of the EIS and reflects:

- Refinements to the Project presented in the Submissions Report
- The commencement of the Wind Energy Guideline (DPHI, March 2024) and the Wind Energy Guideline Technical Supplement for Noise Assessment (Noise Technical Supplement) (DPHI, 2024).

While the Renewable Energy Planning Framework, inclusive of the Wind Energy Guideline and Noise Technical Supplement, do not immediately apply to the Project (as the EIS was lodged before 12 November 2024), it is instructive in resolving any ambiguity in the pre-existing policy framework regarding appropriate setback distances and the assessment of noise impacts within the National Park. Specifically:

- The Wind Energy Guideline provides that turbines should be located at least 100 m (from blade tip to nearest canopy height) away from the mapped boundary of national parks, state conservation areas and nature reserves.
- The Wind Energy Guideline and Noise Technical Supplement (DPHI, 2024) provide that predicted WTG noise levels, when adjusted for tonality and low-frequency noise, should not exceed  $L_{eq} 50$  dB(A) at designated passive recreation areas within National Parks (when in use) for wind speed of 4 metres per second (m/s) or cut-in speed, whichever is greater.

In the sections below, Umwelt also references a EUROBAT Publication article by Rodrigues et al (2015) (refer to Appendix D of the Submissions Report) which recommends a 200 m setback distance from woodlands and forests (or structures that would provide substantial habitat for microbats) to minimise potential turbine strike impacts to microbats. This setback distance is to be measured from the tip of the WTG blade, not the WTG tower itself.

Considering the precautionary assessment (and a conservative 100 m long WTG blade length) assessed in Appendix D of the Submissions Report, the recommended buffer is in the order of 300 m from the WTG locations.

It is noted that whilst a 200 m blade diameter (incl. nacelle) is considered in Appendix D, the blade length for the Project is limited to 91 m based on the Traffic and Transport Impact Assessment (refer to Appendix J of the Submissions Report).

For simplicity, and to enable a comparison of these statements to the figures presented in the EIS, a setback distance of 800 m (measured from the turbine to the boundary of Mallee Cliffs National Park) is referenced in the sections below. Regardless, the Project design achieves the Rodrigues et al (2015) recommended buffer, exceeding that suggested set back by at least 500 m.

## K.2 Consideration of Project SEARs and Agency Advice

**Table K.1** below outlines the specific requirements of the Project SEARs as they relate to Mallee Cliffs National Park, and how these requirements have been addressed during the preparation of the EIS and this Submissions Report.

Agency advice received from the Conservation Programs, Heritage, and Regulation (CPHR) section of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) and the NSW National Parks and Wildlife Service (NPWS) provided further detailed assessment requirements with respect to Mallee Cliffs National Park. **Table K.2** below outlines these agency requirements and how they have been addressed.

Spark Renewables has consulted with NPWS regarding the Project during the development of the EIS (refer to Section 5.0 of the EIS). This consultation would continue through the post approval process to ensure NPWS fire management operations are appropriately considered in the CEMP and OEMPs for the Project.

**Table K.1 Specific SEARs Requirements – Mallee Cliffs National Park**

Requirement	Consideration	Reference
<p>A detailed evaluation of the merits of the project as a whole having regard to feasible alternatives to the development and its key components including project design alternatives to avoid impacts to areas of biodiversity value, indirect impacts to the Mallee Cliffs National Park and areas of archaeological sensitivity, opportunities for shared infrastructure with proposed developments in the region and the consequences of not carrying out the development;</p>	<p>Section 2.7.4 of the EIS provides an overview of the Project alternatives considered and key refinements to the Project design. These refinements included removal or relocation of WTGs located nearest to the Mallee Cliffs National Park boundary, to maintain a variable buffer with a minimum setback of approximately 800 m to the nearest WTGs and the minimisation of impacts to native vegetation and areas of archaeological sensitivity.</p> <p>Spark Renewables has committed to a range of strategies to mitigate potential indirect impacts to biodiversity values within the National Park, which are detailed in Appendix C and Appendix D of the Submissions Report.</p> <p>Further details regarding opportunities for shared infrastructure and the consequences of not carrying out the developed are detailed in Section 2.7 of the EIS.</p>	<p>Section 2.7.4 of the EIS Appendix C and Appendix D of the Submissions Report</p>
<p>A detailed evaluation of the merits of the project as a whole having regard to the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses, including rural villages, rural dwellings, subdivisions, land of high scenic value, conservation areas (including National Parks, Conservation Areas, State Parks and Nature Reserves), state forests, mineral and coal resources, triangulation stations, tourism facilities, existing or proposed wind farms, and the capacity of the existing electricity transmission network to accommodate the development;</p>	<p>The suitability of the site is considered in Section 6.2 of the Submissions Report. The Project has been designed to maximise use of previously disturbed cropping land within the Project Area, whilst maintaining a substantial buffer to the adjacent Mallee Cliffs National Park, thereby minimising both direct and indirect impacts to biodiversity and recreational values associated with the National Park. As such, the site is considered suitable for the carrying out of the Project.</p>	<p>Section 6.2 of the Submissions Report</p>

Requirement	Consideration	Reference
<p>Landscape and Visual – including a detailed assessment of the visual impacts of all components of the project (including turbines, transmission lines, substations, and any other ancillary infrastructure in accordance with the NSW Wind Energy: Visual Assessment Bulletin (DPE, 2016), including detailed consideration of potential visual impacts on local residences (including approved developments, lodged development applications and dwelling entitlements), the amenity values of the Mallee Cliffs National Park, scenic or significant vistas and road corridors in the public domain.</p>	<p>A detailed LVIA has been undertaken for the Project (Appendix 9 of the EIS). The LVIA concludes that the potential visual impacts of the Project will be limited due to the restricted public access within the Mallee Cliffs National Park. The Project’s potential visual impacts to National Parks and Conservation Areas (LCU 05) have been assessed as low. Overall, the LVIA indicates that the Project is unlikely to degrade the scenic values of the Mallee Cliffs National Park.</p>	<p>Appendix 9 of the EIS</p>
<p>Noise and Vibration – assess the noise impacts on amenity / recreational use of the Mallee Cliffs National Park (including walking tracks, campgrounds and lookouts) considering comparable noise amenity levels in the NSW Noise Policy for Industry (EPA, 2017).</p>	<p>As discussed in Section 4.2.14.3, the highest predicted noise levels at the Mallee Cliffs National Park boundary are significantly below the recommended amenity noise level of 50 dB LAeq under the NPfl. While the Project has been conservatively assessed against this recommended amenity noise level, it is noted that due to the absence of walking tracks, campgrounds, lookouts, attractions and activities, facilities or other recreational uses within the Mallee Cliffs National Park, this assessment criterion could be interpreted as not being applicable.</p>	<p>Appendix 10 of the EIS Section 4.2.14 of the Submissions Report</p>
<p>Biodiversity – including: an assessment of the biodiversity values and the likely biodiversity impacts of the project, including impacts associated with transport route road upgrades and indirect impacts on the Mallee Cliffs National Park and surrounding conservation areas in accordance the Biodiversity Conservation Act 2016 (NSW), the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR), including a detailed description of the proposed regime for avoiding, minimising, managing and reporting on the biodiversity impacts (including on grasslands) of the development over time, and a strategy to</p>	<p>A comprehensive BDAR has been undertaken for the Project (Appendix D of the Submissions Report), which includes consideration of potential indirect impacts on the Mallee Cliffs National Park. The proposed setback (minimum 800 m to the nearest WTG) exceeds:</p> <ul style="list-style-type: none"> <li>• The 100 m setback distance (from blade tip to nearest canopy height) established under NSW DPHI’s Wind Energy Guideline (2024)</li> <li>• The habitat buffer distance recommended by a EUROBAT Publication article by Rodrigues et al (2015).</li> </ul>	<p>Appendix C and Appendix D of the Submissions Report <b>Section K.4</b></p>

Requirement	Consideration	Reference
offset any residual impacts of the development in accordance with the BC Act.	<p>Further consideration of impacts to large intact woody vegetation is provided in <b>Section K.4</b> below.</p> <p>Additionally, the BDAR includes a range of recommended strategies to manage indirect biodiversity impacts associated with the Project. These strategies have been adopted by Spark Renewables and are reflected in Appendix C of the Submissions Report.</p>	
Land – including an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: ....the impact of the development on Mallee Cliffs National Park in accordance with the guidelines for Development adjacent to National Parks and Wildlife Services Lands (DPIE, 2020).	Consideration of the guidelines is provided in <b>Section K.3</b> below.	<b>Section K.3</b>

**Table K.2 CPHR and NPWS SEARs Advice – Mallee Cliffs National Park**

Requirement	Consideration	Reference
BCD recommends that the EIS appropriately address the following: 1. Biodiversity / 2. Flooding / 3. Mallee Cliffs National Park.	A detailed assessment is provided within this appendix.	This appendix
<b>The EIS must identify and assess:</b>	<b>Refer below</b>	<b>N/A</b>
<ul style="list-style-type: none"> <li>In the case of a project that adjoins land reserved under Part 4 of the <i>National Parks and Wildlife Act 1974</i>, ensure no encroachment of assets or ancillary infrastructure occurs, and the project is restricted to the development site and adequately buffered from the reserve.</li> </ul>	There is no encroachment of Project infrastructure on the Mallee Cliffs National Park reserve. The Project has been designed to provide a substantial buffer between the proposed WTGs and the National Park boundary. This buffer is of variable width, and provides a minimum setback of approximately 800 m to the nearest WTG.	N/A
<ul style="list-style-type: none"> <li>In the case of a project that adjoins, is in the immediate vicinity of, or upstream of land reserved under the <i>National Parks and Wildlife Act 1974</i>, ensure the matters outlined in the Developments adjacent to National Parks and Wildlife Service lands: Guidelines for consent and planning authorities are adequately considered and include:</li> </ul>	Refer below	N/A
<ul style="list-style-type: none"> <li>o recognition of the natural, cultural, social and educational values attached to that land. The Mallee Cliffs National Park Plan of Management should be considered in the assessment of these values.</li> </ul>	Refer to <b>Section K.5</b> below.	<b>Section K.5</b>
<ul style="list-style-type: none"> <li>o recognition of the impacts, including direct, indirect and cumulative impacts as they relate to the environmental values of that land, its location, and greater landscape connectivity within the South-West REZ</li> </ul>	No direct impacts to environmental values of Mallee Cliffs National Park are expected as a result of the Project. Indirect and cumulative impacts on environmental values and landscape connectivity are considered in Section 6.2 and Section 6.15 of the EIS, as well as Section 8.7 of the BDAR (Appendix D) of the Submissions Report.	Section 6.2 and Section 6.15 of the EIS Appendix D of the Submissions Report

Requirement	Consideration	Reference
<ul style="list-style-type: none"> <li>○ extent of the direct, indirect and cumulative impacts on that land</li> </ul>	<p>No direct impacts to Mallee Cliffs National Park are proposed. The extent of indirect and cumulative impacts are considered in Section 6.15 of the EIS, as well as Section 8.7 of the Revised BDAR (Appendix D of the Submissions Report).</p>	<p>Section 6.15 of the EIS Appendix D of the Submissions Report</p>
<ul style="list-style-type: none"> <li>○ duration of the direct, indirect and cumulative impacts on the interface, the greater environmental values and the reserves connectivity in the landscape to other reserved land</li> </ul>	<p>No direct impacts to Mallee Cliffs National Park are proposed. The duration of indirect and cumulative impacts are considered in Section 3.0, and Section 6.15 of the EIS.</p>	<p>Section 3.0 and Section 6.15 of the EIS</p>
<ul style="list-style-type: none"> <li>○ consideration of any impacts from the development on that part of Mallee Cliffs National Park identified as an Asset of Intergenerational Significance (Asset AIS_EO_221) under Part 12A of the NPW Act. Current values prompting the declaration of the land as an AIS are Numbat, Greater Stick-nest Rat and Bilby.</li> </ul>	<p>Refer to <b>Section K.6</b> below.</p>	<p><b>Section K.6</b> Appendix C and Appendix D of the Submissions Report</p>
<ul style="list-style-type: none"> <li>● Measures proposed to prevent, control, abate, minimise and manage the direct and indirect impacts including an evaluation of the proposed measures effectiveness and reliability over the life of the project.</li> </ul>	<p>No direct impacts to Mallee Cliffs National Park are proposed. Mitigation and management strategies for indirect impacts are outlined in Appendix C and Appendix D of the Submissions Report. These strategies will be further detailed within a comprehensive BMP for the Project. The BMP would include an evaluation of proposed mitigation and management measures, along with a monitoring program to evaluate their effectiveness and reliability over the life of the Project.</p>	<p>Appendix C and Appendix D of the Submissions Report</p>
<ul style="list-style-type: none"> <li>● Residual impacts and their significance subject to the protection and conservation of Mallee Cliffs National Park.</li> </ul>	<p>Subject to the implementation of the proposed mitigation and management measures detailed in Appendix C of the Submissions Report, the Project is unlikely to have any significant residual impacts on the protection and conservation of Mallee Cliffs National Park.</p>	<p>Appendix C of the Submissions Report</p>



Requirement	Consideration	Reference
<ul style="list-style-type: none"> <li>Risks and increased restrictions imposed to land management operations undertaken by NPWS as a result of the proposed windfarm project, especially in the use of low flight aircraft for aerial pest baiting, weed spraying, firefighting and hazard reduction purposes. Justify compliance with Australian Government Civil Aviation Safety Authority regulations. Consult with NPWS when assessing this.</li> </ul>	<p>Detailed assessments have been undertaken with respect to aviation and bushfire safety. Additionally, a LUCRA has been undertaken with respect to edge effects including the spread of pests and weeds. The key findings of these assessments are presented within Section 6.0 of the EIS. Spark Renewables has consulted with NPWS during the preparation of these studies and the outcomes of this consultation process are summarised in Section 5.0 of the EIS.</p>	<p>Sections 5.0 and 6.0 of the EIS</p>
<ul style="list-style-type: none"> <li>Impacts and environmental risks to the values and resilience of Mallee Cliffs National Park.</li> </ul>	<p>Subject to the implementation of the proposed mitigation and management measures detailed in Appendix C of the Submissions Report, the Project is unlikely to result in any significant impacts or materially alter environmental risks to the values and resilience of Mallee Cliffs National Park.</p>	<p>Appendix C of the Submissions Report</p>
<ul style="list-style-type: none"> <li>Bushfire protection requirements attached to the proposed windfarm project ensuring they are restricted to the development site, and all ignition threats relating to the project are identified and planned for within the confines of the development site. No fire management is to affect, burden or threaten land reserved as Mallee Cliffs National Park, including any impact on NPWS fire management operations. The Mallee Cliffs National Park Fire Management Strategy should be considered in this assessment.</li> </ul>	<p>A Bush Fire Hazard Assessment has been undertaken for the Project (Appendix 17 of the EIS), with the key findings summarised in Section 6.0 of the EIS. Potential ignition threats have been considered during Project design and all APZs would be fully contained within the Project Area without encroaching on Mallee Cliffs National Park.</p> <p>There are three (3) informal access points located along the southeastern Project Boundary, providing restricted access for NPWS, the Australian Wildlife Conservancy (AWC) and RFS into Mallee Cliffs National Park. No formal easement exists to permit access through the Project Area, however these access points are identified in the Mallee Cliffs National Park Fire Management Strategy. Spark Renewables has committed to facilitate continued access to Mallee Cliffs National Park for conservation and emergency management purposes for the life of the Project, noting that the existing access points may be relocated or rationalised (in consultation with the affected stakeholders) to improve access for bushfire fighting and to meet the operational needs of the Project.</p>	<p>Section 6.0 and Appendix 17 of the EIS</p>

Requirement	Consideration	Reference
	<p>Spark Renewables has committed to develop an access protocol in consultation with NPWS, AWC and RFS. The access protocol will include procedures to inform stakeholders of any temporary disruption or change to access arrangements.</p> <p>Spark Renewables has consulted with NPWS regarding bush fire management (amongst other matters) as detailed in Section 5.0 of the EIS. This consultation would continue through the post approval process to ensure NPWS fire management operations are appropriately considered in the CEMP, OEMP and DRP for the Project.</p>	
<ul style="list-style-type: none"> <li>Risk of interference to the functionality and operation of the emergency telecommunications system used by NPWS on Mallee Cliffs National Park as a result of the proposed windfarm project. Consult with NPWS when assessing this.</li> </ul>	<p>A Telecommunications Impact Assessment has been undertaken for the Project in consultation with NPWS (Appendix 18 of the EIS). This assessment has concluded that the Project is unlikely to directly impact any NPWS telecommunications systems, however, mitigation strategies will be implemented should any unforeseen impacts to these systems arise during the life of the Project.</p>	<p>Appendix 18 of the EIS</p>

## K.3 Guidelines for Developments adjacent to NPWS lands

As required by the SEARs (SSD-53293710), and the additional consideration of potential impacts requested within the agency advice received from CPHR and NPWS (refer to **Table K.2** above), the EIS and subsequently this Submissions Report has considered the impact of the Project on the Mallee Cliffs National Park with regard to the *NSW National Parks & Wildlife Service – Developments adjacent to National Parks and Wildlife Service lands – Guidelines for consent and planning authorities* (NPWS, 2020) (the DPIE, 2020 guidelines).

The DPIE, 2020 guidelines were prepared for use by councils and other planning authorities when they assess development applications that may impact on land and water bodies managed by NPWS. The goal of these guidelines is to guide consent and planning authorities in their assessment of development applications that are adjacent to land managed by NPWS. The advice aims to avoid any direct or indirect adverse impacts on NPWS parks (NPWS, 2020).

To ensure the objectives of the DPIE, 2020 guidelines are met, a substantial variable width buffer has been provided along the Mallee Cliffs National Park boundary. The minimum setbacks from the Mallee Cliffs National Park Boundary to proposed Project infrastructure are as follows:

- approximately 800 m to the nearest WTG
- approximately 600 m to the nearest hardstands, access tracks and all other Project infrastructure (excluding WTGs and meteorological masts)
- approximately 140 m to the nearest meteorological mast.

The specific issues that must be considered with respect to the DPIE, 2020 guideline are listed below, as well as a summary of the potential impacts associated with the Project.

- **Erosion and sediment control:** based on the findings of both water and soil impact assessments mitigation measures have been recommended with respect to erosion and sediment control. Accordingly, with the implementation of these measures, and the substantial buffer proposed, erosion and the movement of sediment onto NPWS land is not anticipated.
- **Stormwater runoff:** based on the findings of the water impact assessment mitigation measures have been recommended. The Project design also incorporates a suitable allowance for drainage (near access roads etc) that would be confirmed during detailed design and prior to the commencement of construction. Accordingly, with the implementation of these measures, and the substantial buffer proposed, stormwater issues are not anticipated and would be reduced to negligible levels prior to reaching NPWS land. No detrimental change to hydrological regimes is anticipated as a result of the Project.
- **Wastewater:** the Project does not have substantial need for sewage disposal beyond the TWA compound which will incorporate temporary sewage management facilities. Subject to appropriate treatment, treated water may be used to supplement rainwater captured for non-potable functions such as toilet flushing. Any wastes associated with the sewage treatment plant that are not suitable for re-use on-site will be disposed of off-site to a suitably licenced facility. On site sewerage collection/treatment infrastructure will continue to be used during operation. The TWA is located approximately 7.5 km from the Mallee Cliffs National Park boundary and hence no adverse impacts on NPWS land due to wastewater from the Project are anticipated.

- **Management implications relating to pests, weeds and edge effects:** based on the findings of both the Revised BDAR (refer to Appendix D of the Submissions Report) and soil, land and agricultural impact assessment (refer to Appendix 14 of the EIS), and as summarised within Section 6.0 of the EIS, appropriate mitigation measures have been recommended to manage the spread of pests and weeds, along with other edge effects. Accordingly, with the implementation of these measures, and the substantial buffer proposed, increased impacts associated with pests, weeds and edge effects are not anticipated.
- **Fire and the location of asset protection zones:** based on the findings of the Bush Fire Hazard Assessment, mitigation measures have been recommended. Suitable APZ and static water supply have been incorporated into the Project's design. The Project's bushfire threat is considered low and the Project meets the criteria outlined in Section 8.3.5 PBP, 2019 (Wind and Solar Farms). Accordingly, with the implementation of the proposed mitigation measures and with consideration to the positive impact to bushfire fighting that the increased access the Project will provide (through the construction of internal access roads), an acceptable bushfire threat has been determined and potential impacts to the Mallee Cliffs National Park are considered negligible. All asset protection measures are within the Project Area, and there is no expectation for NPWS/AWS to change existing fire management regimes within the Mallee Cliffs National Park.
- **Boundary encroachments and access through NPWS lands:** the Project will not encroach on or limit access through the Mallee Cliffs National Park. No pre-construction, construction and/or post-construction activity associated with the Project will occur on land managed by NPWS.

The Mallee Cliffs National Park is not directly accessible via public roads, but rather is accessed via private properties to the west, the southwest and the southeast. Internal access within Mallee Cliffs National Park is then provided by a system of fire trails. However, an objective of the Mallee Cliffs National Park Plan of Management (NPWS, 2018) is to establish secure, legal and practical public access for visitors.

As discussed in **Table K.2** above, Spark Renewables will continue to facilitate access to Mallee Cliffs National Park for conservation and emergency management purposes via the Project Area, noting that the existing access points may be relocated or rationalised (in consultation with NPWS, AWC and RFS) to improve access for bushfire fighting and to meet the operational needs of the Project. Any temporary construction fencing or permanent security fencing will be located to ensure that access is maintained.

Spark Renewables has committed to develop an access protocol in consultation with NPWS, AWC and RFS. The access protocol will include procedures to inform stakeholders of any temporary disruption or change to access arrangements. Any such disruptions are unlikely to materially affect conservation or emergency management functions, since alternative access would be still available from other entry points within the Project Area, or from private properties to the southwest or southeast of the Mallee Cliffs National Park.

Spark Renewables has consulted with NPWS during the development of the EIS (refer to Section 5.0 of the EIS). No specific concerns have been raised in relation to access arrangements. Accordingly, boundary encroachment and access impacts are not anticipated.

- **Visual, odour, noise, vibration, air quality and amenity impacts:** based on the findings of the specialist assessments conducted for these environmental matters, a range of reasonable and feasible mitigation measures have been established to further mitigate and manage impacts to off-site receivers, including the Mallee Cliffs National Park. With these measures being implemented, impacts to the Mallee Cliffs National Park are predicted to be low or negligible. No reduction of amenity on NPWS land due to the Project is anticipated.
- **Threats to ecological connectivity and groundwater-dependent ecosystems:** no Project interactions with groundwater are anticipated. During iterative refinement to the Project layout Spark Renewables has applied the following hierarchy (in order of priority): avoid, minimise, mitigate and offset (refer to Section 2.7 of the EIS) to address biodiversity impacts. Based on this a comprehensive BDAR has been prepared to address the SEARs and provide additional consideration of potential impacts as requested within the agency advice received from CPHR and NPWS. A range of reasonable and feasible mitigation measures have been established to further mitigate and manage impacts. With these factors in mind and acceptable impact to native vegetation (and other flora and fauna habitats) that provide a linkage, buffer, home range or refuge role within the Project Area is anticipated. No impacts to groundwater-dependent ecosystems within NPWS land are anticipated.
- **Cultural heritage:** during iterative refinement to the Project layout Spark Renewables has applied the following hierarchy (in order of priority): avoid, minimise, mitigate and offset (refer to Section 2.7 of the EIS) to address Aboriginal cultural heritage impacts. Based on this a comprehensive ACHA report has been prepared to address the SEARs, relevant agency advice and feedback from RAPs. Suitable mitigation and management measures have been established. With these factors in mind the impact to Aboriginal sites within the Project Area has been minimised, and no impact to areas and sites of heritage value on NPWS land, including Aboriginal cultural heritage, are anticipated.
- **Road network design and its implications for continued access to the park:** site access for the Project is via Arumpo Road, located to the west of the Project Area and away from the Mallee Cliffs National Park. Spark Renewables has committed to maintain access to Mallee Cliffs National Park via the Project Area throughout the life of the Project, as outlined above. The establishment of new internal roads for the Project would not impede continued access via established tracks, however, the newly constructed roads may provide a superior alternative access route for NPWS, AWS and RFS to access Mallee Cliffs National Park. Opportunities for these key stakeholders to utilise the Project's internal road network would be explored in collaboration with NPWS, AWS and RFS during the development of a detailed access protocol.

A detailed assessment of traffic impacts has been prepared to address the SEARs and agency advice received from TfNSW. A range of reasonable and feasible mitigation measures have been established to further mitigate and manage impacts. No access impacts are anticipated.

## K.4 Proximity of WTGs to Large Intact Patches of Woody Vegetation

Mallee Cliffs National Park provides high quality habitat for woodland birds, and due to its size and lack of ongoing disturbances provides better habitat than the habitats present within the Project Area. The Project Area contains extensive cropping and a large portion of the impacts associated with the Disturbance Footprint occur to windrow remnants of native vegetation with large edge effects. Mallee Cliffs National Park may also provide suitable foraging and breeding habitat for hollow dependant microbats species, predicted to occur within the Disturbance Footprint.

Section 5.4.1 of the Wind Energy Guideline (DPHI, 2024) establishes key design principles to avoid or minimise impacts to bird and bats. This includes a general principle that turbines should be sited at least 100 m (from blade tip to nearest canopy height) away from the mapped boundary of national parks, state conservation areas and nature reserves. For the current Project, which proposes a maximum blade length of 91 m, the recommended buffer is therefore 191 m from the WTG.

Given the proximity of the Project to Mallee Cliffs National Park, the Revised BDAR (Appendix D of the Submissions Report) has also considered a EUROBAT Publication article by Rodrigues et al (2015) regarding the proximity of WTGs to the National Parks Estate comprising Mallee Cliffs National Park.

Rodrigues et al (2015) suggests that WTGs should be located a minimum of 200 m away from woodlands and forests (or structures that would provide substantial habitat for microbats) to minimise potential WTG strike impacts to microbats. Importantly, the 200 m distance is to be measured from the tip of the WTG blade, not the WTG tower itself. For the current Project, which proposes a maximum blade length of 91 m, the recommended buffer is therefore 291 m from the WTG.

The Project design and incorporated buffer to the Mallee Cliffs National Park is a result of careful and considered avoidance and minimisation of the design following direct feedback from the biodiversity assessment. As a result of this process, the closest WTG is located approximately 800 m from the boundary of the Mallee Cliffs National Park and the associated canopy, which exceeds the recommended:

- 191 m buffer (per the Wind Energy Guideline) by at least 600 m
- 291 m buffer (as per Rodrigues et al (2015)) by at least 500 m.

## K.5 Mallee Cliffs National Park Plan of Management (PoM)

This EIS (including the supporting technical specialist assessments) were prepared having regard to the Mallee Cliffs National Park PoM (OEH, 2018). In particular, the PoM emphasises that the primary purpose of the park has been nature conservation and access by the public has been limited mostly to researchers and bird watching groups who visit a few times a year. Since reservation, recreation has been excluded from Mallee Cliffs National Park as access to the park is via private roads over adjoining private land. Consequently, the key consideration for potential land use conflicts associated with the Project relates to indirect biodiversity impacts, rather than impacts to the Park's recreational or scenic values or existing infrastructure. Relevant objectives of the PoM include:

- The environment of the park is protected and where necessary restored to be a healthy, stable, representative sample of mallee and belah ecosystems of south-west NSW.

- Native plant communities are protected and where necessary restored.
- Threatened and rare plant communities and species are protected.
- Understanding of the ecology, distribution, threats and management needs of native plant communities is added to and applied in the park.
- Fire in the park is managed to conserve and maintain semi-arid ecosystems while also protecting park management infrastructure.
- Native animal populations are protected and maintained.
- Populations of malleefowl and other rare, threatened or isolated animal species are protected and maintained.
- Pest animals are controlled and where possible eliminated from the park.
- Aboriginal and shared histories are protected.
- Public access will continue to be limited to natural and cultural resource conservation activities, environmental education and research.

Consistent with the objectives of the PoM, a range of strategies are proposed to mitigate and manage the Project's impacts on biodiversity (including pest and biosecurity management), Aboriginal cultural heritage values and bushfire management regimes (refer to Appendix C of the Submissions Report). This will include the development and implementation of detailed management plans (including a BMP, ACHMP and BFEMOP) and continued consultation with NPWS. On this basis, it is considered that the Project can be carried out in a manner that is consistent with the PoM.

## K.6 Asset of Intergenerational Significance – Mallee Cliffs National Park

Section 153G of the NPW Act allows the NSW Minister for the Environment to declare an area to be an AIS. An AIS can be any area of exceptional environmental or cultural value that warrants special protection including dedicated management measures. To date, a total of 279 AISs have been declared throughout NSW (NPWS, August 2024). In identifying potential environmental AISs, NPWS may give consideration to the following (amongst other factors):

- sites for critically endangered, endangered, or vulnerable species
- important areas for breeding, feeding or shelter
- locations where locally extinct mammal species are being reintroduced
- where the national park otherwise provides important habitat.

A portion of Mallee Cliffs National Park was declared an AIS in September 2021. The declared AIS (AIS\_E0\_221) comprises an area of approximately 9,657 ha as shown in **Figure K.1**.

The purpose of the Mallee Cliffs National Park AIS is to facilitate the reintroduction of three (3) species which are listed as extinct under the BC Act, being Numbat (*Myrmecobius fasciatus*), Bilby (*Macrotis lagotis*) and Greater stick-nest rat (*Leporillus conditor*). Reintroduction of the three (3) species within Mallee Cliffs National Park is being undertaken by AWS, and commenced in October 2019 (AWS, 2024).

In addition to the three (3) key species, additional species have been reintroduced into the AIS area, including Brush-tailed Bettong (*Bettongia penicillata ogilbyi*), Red-tailed Phascogale (*Phascogale calura*) and Mitchell's Hopping Mouse (*Notomys mitchellii*). AWS has also announced plans to reintroduce other endangered mammals including the Western Quoll (*Dasyurus geoffroii*), Western Barred Bandicoot (*Perameles bougainville*), Bridled Nailtail Wallaby (*Onychogalea fraenata* *Macropodidae*) and Burrowing Bettong (*Bettongia lesueur graii*).

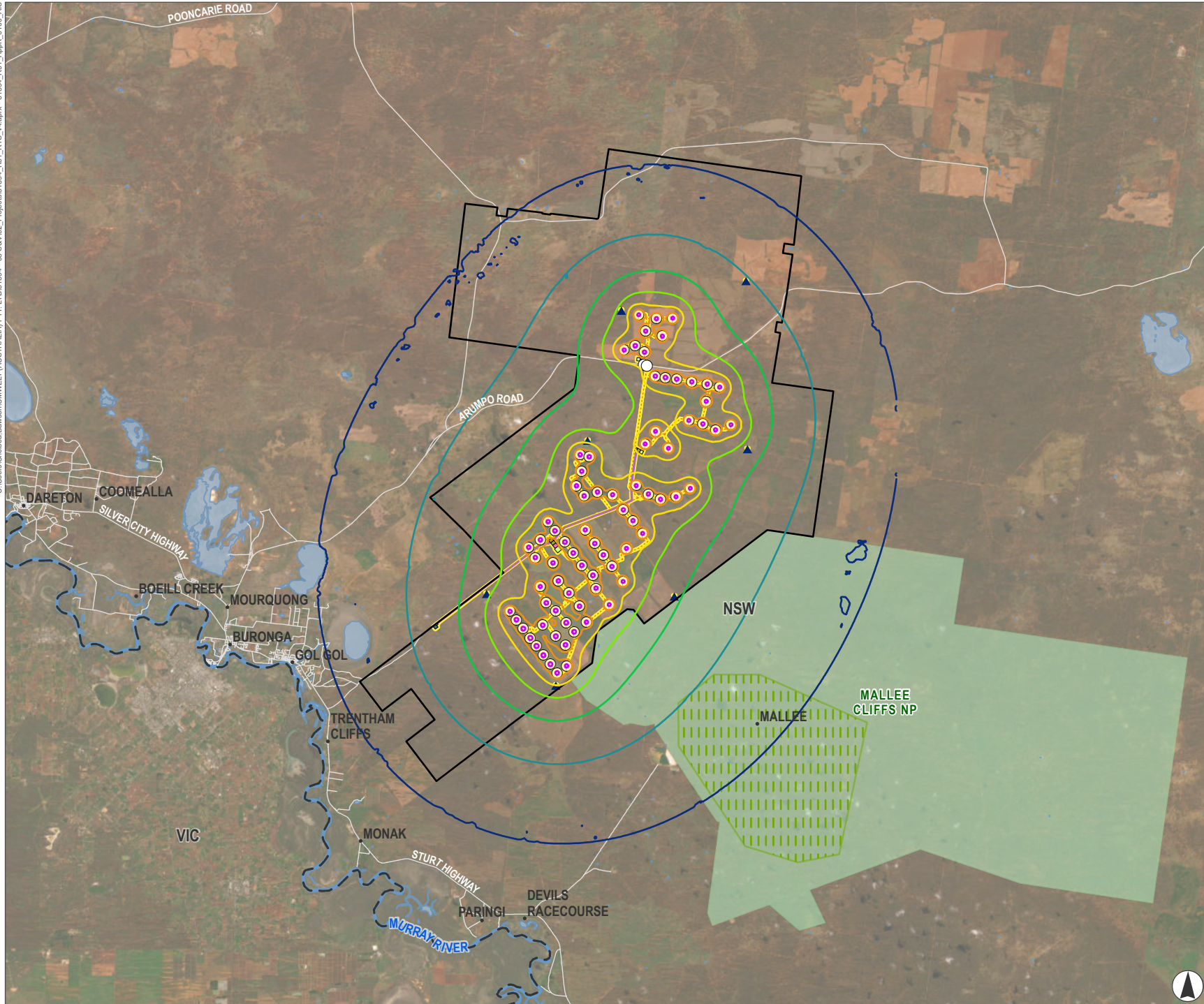
To manage the reintroduction of the three (3) key species, the following Draft Conservation Action Plans (CAPs) have been prepared:

- Draft Conservation Action Plan, Numbat (*Myrmecobius fasciatus*) (NSW DECCW, March 2024)
- Draft Conservation Action Plan, Bilby (*Macrotis lagotis*) (NSW DCCEEW, March 2024)
- Draft Conservation Action Plan, Greater stick-nest rat (*Leporillus conditor*) (NSW DCCEEW, March 2024).

The Draft CAPs outline the identified environmental values for the AIS, which for all three (3) species, are to create a feral predator-free area and important habitat to enable reintroduction, establishment and maintenance of viable wild Numbat, Bilby and Greater stick-nest rat populations.

Importantly, the fenced area identified for species reintroduction is located a substantial distance (more than 5 km southeast of the Project Boundary), as shown in **Figure K.1**. As such the Project will have no direct impact on the AIS, and the potential for indirect impacts is considered to be limited.





**FIGURE K.1**  
**Mallee Cliffs National Park**  
**Asset of Intergenerational**  
**Significance**

- Legend**
- Project Boundary
  - Road
  - Watercourse
  - Waterbody
  - NPWS Reserve
  - Asset of Intergenerational Significance
  - State Border
- Predicted noise contour (dB)**
- 50
  - 45
  - 40
  - 35
  - 30
  - 25
  - 20
- Project Layers**
- Access Points
  - Wind Turbine Generators
  - Permanent Meteorological Masts
  - Access Tracks
  - HV Transmission Line
  - Disturbance Footprint
  - Collector Substation and Switchyard
  - Operations and Maintenance Facility
  - Construction Compound
  - TWA Facility
  - Switchyard
  - Battery Energy Storage System (BESS)



Scale 1:325,000 at A4  
 GDA2020 MGA Zone 54



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The Draft CAPs identify key risks to the environmental values of the AIS, which include inappropriate fire regimes, feral predators, feral herbivores and pigs, interactions with native species, disturbance (i.e. damage to fencing), inbreeding depression and loss of genetic diversity, unsustainable population levels. The Draft CAPs therefore set out a range of conservation actions to control, mitigate or abate these risks.

**Table K.3** below sets out the key risks relevant to the Project and how any related indirect impacts generated by the Project will be mitigated. These commitments are reflected in Appendix C of the Submissions Report. Subject to the implementation of these measures, it is considered that the Project is compatible with the identified environmental values of the AIS and the conservation actions established under the Draft CAPs.

**Table K.3 Consideration of Key Risks to the Mallee Cliffs National Park AIS**

Key Risk	Mitigation
<b>Inappropriate fire regimes</b>	<p>Subject to the implementation of the proposed mitigation measures and with consideration to the positive impact to bushfire fighting that the increased access the Project will provide, the Project is expected to have a negligible impact on fire regimes within the Mallee Cliffs National Park.</p> <p>Spark Renewables has consulted with NPWS regarding the Project (refer to Section 5.0 of the EIS). This consultation would continue through the post approval process to ensure NPWS fire management operations are appropriately considered in the CEMP and OEMPs for the Project.</p>
<b>Feral predators, feral herbivores and pigs</b>	<p>Based on the findings of both the Revised BDAR (refer Appendix D of the Submissions Report) and soil, land and agricultural impact assessment (refer Appendix 14 of the EIS), and as summarised within Section 6.0 of the EIS, appropriate mitigation measures have been recommended to manage the spread of feral species.</p> <p>Spark Renewables has consulted with NPWS regarding the Project (refer to Section 5.0 of the EIS). This consultation would continue through the post approval process to ensure CEMP and OEMPs for the Project have due regard to the AIS and the draft Conservation Action Plans (or later versions).</p>



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