

Clearing Referral Supporting Information

Kwinana Battery Energy Storage System Stage 2

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Clearing Referral Supporting Information - Kwinana Battery Energy Storage System Stage 2

1 ENDORSEMENTS

SIGN OFF	SIGNATURE	NAME AND TITLE	OPERATING UNIT
[REDACTED]	[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED]
Approval Details			
Date	2 March 2023		
DM number	28733972		

2 ABBREVIATIONS

BESS – battery energy storage system

KBESS 1 – Kwinana battery energy storage system Stage 1

KBESS 2– Kwinana battery energy storage system Stage 2

DWER – Department of Water and Environmental Regulation

ESA – Environmentally Sensitive Area

Subject Site – Site where the BESS is proposed to be located

PEC – Priority Ecological Community

TEC – Threatened Ecological Community

3 INTRODUCTION

Synergy is planning to construct a 250MW/1000MWh Kwinana Battery Energy Storage System Stage 2 (**KBESS 2**) and associated infrastructure on land at the Kwinana Power Station.

4 SUBJECT SITE AND SURROUNDINGS

KBESS 2 is located on Lot 22 Weston Street Naval Base. The site was largely cleared as part of the Kwinana Power Station development during the late 1960s and early 1970s.

The proposed battery energy storage system (**BESS**) will be located approximately 300 metres south of the first BESS stage (**KBESS 1**) (**subject site**). The subject site is predominantly located within the former Coal Stockyard, which was decommissioned and remediated in 2018 and 2019. KBESS 2 will share the same substation infrastructure currently under construction for KBESS 1.

The subject site is located within the Kwinana Strategic Industrial Area on the Swan Coastal Plain, situated approximately 30 kilometres southwest of the Perth central business district, 17 kilometres south of Fremantle and 5.5 kilometres northwest of the Kwinana town centre.

5 CLEARING DESCRIPTION

It will be necessary to clear vegetation within the subject site for the purposes of construction of KBESS 2.

Approximately 0.72 ha of potentially native vegetation is proposed to be cleared (**Appendix A**). This vegetation is comprised of a mix of planted and exotic species interspersed with native vegetation (**Appendix B, Figures 5-8**), hence represents an over-calculation of native vegetation referred for clearing. Areas of non-native vegetation will also be cleared (**Appendix A; Appendix B, Figures 1-4**) and are not included in this referral.

6 VEGETATION ASSESSMENT

A desktop assessment was undertaken of the proposed clearing against the criteria of the Native Vegetation Clearing Referrals Guideline (DWER 2021), and confirmed through a site inspection. Photos of vegetation proposed to be cleared are shown in **Appendix B**.

The extent and thresholds of proposed clearing meet Criterion 1, as outlined in **Table 1**.

Table 1 – Criterion 1: Thresholds and criteria used to determine if a permit is required (Metropolitan Perth and Greater Bunbury Region Scheme constrained areas)

Criteria	Threshold	Response
Extent of proposed clearing for each referral	If more than 1 ha is proposed to be cleared, a permit is required.	An area of potentially native vegetation measuring 0.72 ha is proposed for clearing (Appendix A). This area is composed of a mix of non-native and native species.
Threshold for remaining extent of that native vegetation association or complex in the relevant IBRA bioregion	If less than 10% of that native vegetation association or complex is remaining within the relevant IBRA bioregion, a permit is required.	IBRA Sub-Region SWA2 Swan Coastal Plain, Perth West: Vegetation association 3048 Shrublands; scrub-heath on the Swan Coastal Plain - 29.21% remaining East: Vegetation association 998 Medium woodland; tuart - 36.25% remaining

		Due to the completely degraded condition of the vegetation where patches of native vegetation are small (individual trees), fragmented and isolated, it is unlikely that the remnant vegetation on the site can be described as native vegetation associations 3048 or 998.
Threshold for remaining native vegetation surrounding the boundary of the proposed clearing	If less than 10% native vegetation is remaining within a 5 km buffer of the proposed clearing, a permit is required	More than 10% of native vegetation is remaining within a 5 km buffer of the proposed clearing (based on DPIRD-005 native vegetation extent SLIP data).

For Criterion 2, the vegetation proposed for clearing is unlikely to be of significant environmental value as described in Table 2.

Table 2 – Criterion 2: Known or likely significant environmental values within the area

Environmental value	Considerations
Vegetation condition	Completely degraded.
Significant fauna	<p>While no significant fauna have been recorded within the subject site, there are records of priority fauna within one kilometre.</p> <p>It is presumed these records are related to the following species, based on the City of Kwinana Local Biodiversity Strategy 2022 (Focused Vision Consulting Pty Ltd):</p> <ul style="list-style-type: none"> Graceful sunmoth (<i>Synemon gratiosa</i>) (P4) Swan Coastal Plain Shield-backed Trapdoor Spider (<i>Idiosoma sigillatum</i>) (P3) Quenda (<i>Isoodon fusciventer</i>) (P4) Perth Slider (<i>Lerista lineata</i>) (P3). <p>Of these species, the Quenda has been observed in proximity to the subject site. Due to the vegetation being in a completely degraded condition with no native understorey, it is unlikely that the vegetation supports any of these priority fauna.</p>
Fauna habitat	Due to the vegetation being in completely degraded vegetation, there is very little fauna habitat value to the vegetation.
Significant ecological linkage	The vegetation remaining is highly fragmented and in completely degraded condition, therefore it does not provide linkage between vegetated areas with ecological value.
Mapped ecological community	The subject site is not within a PEC or TEC, nor an Environmentally Sensitive Area (ESA). Only a few Tuarts occur within the site (three) with absence of other flora and fauna that occur in association with Tuart woodlands. Therefore, the vegetation within the site is not considered representative of the TEC 'Tuart (<i>Eucalyptus gomphocephala</i>) woodlands and forests of the Swan Coastal Plain' under the EPBC Act.
Significant flora	No significant flora are recorded within or in proximity to the subject site.
Mapped wetland	No mapped wetlands are recorded within the subject site. The nearest wetlands are classified as resource enhancement and are located approximately 700 metres to the south-east and one kilometre to the north-east.
Mapped watercourse	The subject site is not within a mapped watercourse, nor are there any watercourses in proximity to the subject site.
Water resources (e.g. public drinking water supply areas)	The subject site is not within any public drinking water supply areas and is located within an industrial area. The area is not at risk of increasing salinity from vegetation clearing.
Conservation reserve	The subject site is located within an industrial area and is not within a conservation reserve or an ESA.

Land and soil quality	The Quindalup and Spearwood systems are mapped within the subject site. The area is not subject to land degradation associated with land clearing. Notwithstanding this, the area is classified as 'Contaminated – Remediation Required' under the Contaminated Sites Act 2003.
Heritage-related values and native title matters	No heritage sites are recorded within or in close proximity to the subject site. The nearest registered Aboriginal heritage site is approximately 3.6 kilometres to the south-east, while the nearest historic heritage site is approximately two kilometres to the north.

The remaining vegetation within the subject site is completely degraded and is not considered representative of the pre-European vegetation associations discussed above. The state of scientific knowledge of native vegetation within the region (Criterion 3) is therefore considered adequate.

The proposed clearing will not require conditions to minimise, mitigate or offset effects on the environment given that the majority of the site is already cleared and industrially developed with minimal and completely degraded vegetation. Therefore conditions will not be required to manage environmental impacts (Criterion 4).

7 CONCLUSION

In summary, the vegetation proposed to be cleared is within an industrial area and is in a completely degraded condition. It is not believed the proposed clearing will have an impact on the environment and therefore, meets the criteria for a clearing referral.

APPENDIX A: PROPOSED CLEARING OF POTENTIALLY NATIVE VEGETATION AND NON-NATIVE VEGETATION



APPENDIX B: PHOTOS OF VEGETATION PROPOSED FOR CLEARING



Figure 1: Predominantly cleared areas with some planted non-Western Australian *Eucalyptus* sp. in the eastern portion of the site facing south-west.



Figure 2: Parkland cleared over grassed areas with scattered planted exotic and non-Western Australian native species in the south-eastern corner of the site facing west, along the southern boundary of the site.



Figure 3: Avenue of planted non-Western Australian and Western Australian Eucalyptus species on cleared areas on the internal road, facing west showing the central open cleared area and internal road on either side.



Figure 4: Mix of planted species (*Eucalyptus* and *Callistamon* species) and weeds in a sump in south-east corner of the site.



Figure 5: Predominantly cleared area with planted non-Western Australian and Western Australian *Eucalyptus* species in the eastern portion of the site facing north-west.



Figure 6: Cleared parkland with planted non-Western Australian and Western Australian *Eucalyptus* species on the eastern portion of the site facing west.

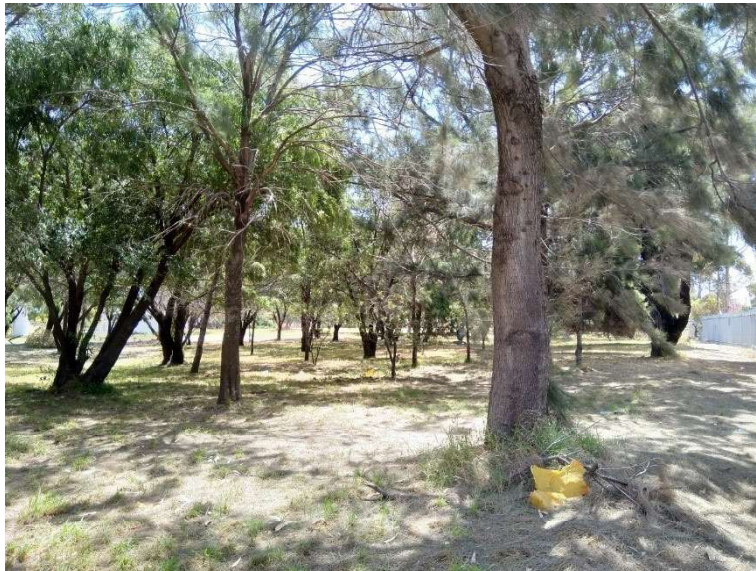


Figure 7: Parkland cleared with potentially native *Allocasuarina* sp. with occasional planted species (*Callistamon* sp.) and self-seeded *Acacia* spp on the eastern portion of the site facing north.



Figure 8: Parkland cleared with potentially native *Allocasuarina* sp. and *Agonis flexuosa* with occasional planted species (*Callistamon* sp.) on the eastern portion of the site facing west.