# ANNUAL COMPLIANCE REPORT 2023



# Sapphire Wind Farm, NSW EPBC 2011/5854

1 December 2023



#### **Revision Control**

Revision	Date	Issue	Author	Reviewed	Approved	Signature
1	01/12/23	Final/Issued	Z Jokadar	R. Macdonald	R. Macdonald	Afall

#### Confidentiality

This document contains proprietary and confidential information, which is provided on a commercial in confidence basis. It may not be reproduced or provided in any manner to any third party without the consent of Squadron Energy Pty Ltd.

© Copyright Squadron Energy 2023. This work and the information contained in it are the copyright of Squadron Energy Pty Ltd. No part of this document may be reprinted or reproduced without the consent of Squadron Energy Pty Ltd.

#### Disclaimer

Whilst every effort has been made to ensure the accuracy of this information, the publisher accepts no responsibility for any discrepancies and omissions that may be contained herein.

# Contents

1	Project Description	1
2	Compliance Table	2

### Tables

ble 1 Compliance Table
------------------------

## **Declaration of accuracy**

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed

Kfall

Full name (please print):	Rochelle Macdonald
Position (please print):	Executive General Manager Operations
Organisation (please print	SWF1 Operations Pty Ltd (ACN 601 425 316)
including ABN/ACN if	SWF2 Operations Pty Ltd (ACN 601 425 325)
applicable):	SWF3 Operations Pty Ltd (ACN 601 425 334)
Date: 15/12/2023	

# **1 Project Description**

The Sapphire Wind Farm (SWF) is located 28 km east of Inverell and 18 km west of Glen Innes in the Northern Tablelands of NSW. The wind farm site covers approximately 8,921 ha of land that has been mostly cleared for grazing, however areas of scattered remnant woodland still exist across the site, and on the elevated ridges to the north, north-east and south. The area is of moderate-to-high elevation (750 m to 1,100 m above sea level, Australian Height Datum (AHD)), adjacent to the Waterloo Range to the east of the Project. The nearest township is Glen Innes, which is located approximately 18 km to the east along the Gwydir Highway.

Development Consent was granted by the NSW Planning Assessment Commission (09\_0093) on 26 June 2013 and later modified on the 30 June 2016.

The Minister for Environment and Energy granted approval of SWF on 5 December 2014 with conditions covered by EPBC 2011/5845. The approval holder is SWF1 Operations Pty Ltd (ACN 601 425 316), SWF2 Operations Pty Ltd (ACN 601 425 325) and SWF3 Operations Pty Ltd (ACN 601 425 334). Variations to the EPBC approval were granted on the 21 June 2016 and 4 March 2018.

The project involves construction, operation and decommissioning of SWF. Construction on the site commenced December 2016 and operations commenced November 2018.

As required by Condition 8 of EPBC 2011/5845, the following report covers the 2023 reporting period, being the 12 months previous to the 31 December 2023. During the reporting period, SWF has been in the operational phase.

# 2 Description of Activities

Activities undertaken at the Project during the reporting period included:

- Operation of 75 WTGs;
- · Regular maintenance of the WTGs; and
- · Land management including weed control, biodiversity offset management.

# **3** Compliance Table

Table 1 Compliance Table as per the conditions of the EPBC Approval 2011/5854

Number	Condition	Stage	Complianc e Status	Status / Comment
1	The person taking the action must provide <b>The Minister</b> with a <b>Construction Flora and Fauna Management Plan</b> . The <b>Construction Flora and Fauna Management Plan</b> must:	Pre- construction	Compliant	The Construction Flora and Fauna Management Plan (CFFMP) was approved by the Minister 18 November 2016 (prior to commencement of construction 9 December 2016). No change to the CFFMP has occurred within the reporting period.
1(a)	meet the requirements of <b>Conditions E21</b> and <b>E22(f)</b> of the NSW Minister for Planning and Environment's approval of the proposed action; and	Pre- construction	Compliant	Section 5.6 of the CEMP and Annex G (CFFMP).
1(b)	include analysis of the impacts on Regent Honeyeater and Swift Parrot and how these impacts will be managed (including relocation and micro-siting).	Pre- construction	Compliant	Section 5.6 of the CEMP and Annex G (CFFMP).
1	<b>Commencement of construction</b> may not occur until the Construction Flora and Fauna Management Plan has been approved by the Minister.	Pre- construction	Compliant	The CFFMP was approved by the Minister 18 November 2016 (prior to commencement of construction 9 December 2016).
2	<b>Prior to commencement of construction</b> , the approval holder must provide for the Minister's approval a <b>Biodiversity Offset Package (Package)</b> to protect White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community (BGW), and habitat for the Regent Honeyeater, Swift Parrot and Border Thick-tailed Gecko in perpetuity. The Package must:	Pre-Operation	Compliant	The Biodiversity Offset Package (BOP) was approved by the Minister on 4 March 2018. In accordance with the letter from the NSW Secretary on 2 December 2016, the Biodiversity Offset Package may be revised once final credit calculations are available for each Offset Site, during the BioBank registration process. An Addendum BOP was prepared on 27 October 2023, to reflect the final credit calculations for each offset site. See Appendix A. The updates of the BOP did not affect the mechanism for fulfilling the biodiversity offset obligations under the EPBC 2011/5845 approval. The updates in the Addendum BOP do not change how any of the activities are carried out in accordance with the approved BOP.

Number	Condition	Stage	Complianc e Status	Status / Comment
				The following sections of the BOP were revised to update the number of credits for the types of species and ecosystems present at each offset site, and the Total Fund Deposit for each Offset site:
				Section 2.1.2 Offset Site A Biodiversity values
				Section 2.1.4 Management Actions and Costs
				Section 2.2.2 Offset Site B Biodiversity values
				<ul> <li>Section 2.2.4 Management Actions and Costs</li> </ul>
				The following sections of the BOP were revised to describe the types and quantities of credits that would be sourced from each Offset site to meet the credit offset obligations required by the NSW Conditions of Consent MP09-0093 Mod 1:
				Section 3.1.1 Ecosystem Requirements
				Section 3.1.2 Species Requirements.
				All other sections of the approved BOP remain the same.
2(a)	Outline the purpose of the Package;	Pre-operation	Compliant	Section 1.2, 1.3 and 4.1 of the approved BOP.
2(b)	Include map/s that clearly depict BGW, Border Thick-tailed Gecko, Regent Honeyeater and Swift Parrot habitat in the offset sites;	Pre-operation	Compliant	Figures 4, 5, 8, 9 and 10 in Section 2.1 and 2.2 of the approved BOP.
2(c)	Describe how the offset sites will be legally secured and managed to ensure the enduring value of the offset; and	Pre-operation	Compliant	Section 4.4 of the approved BOP.
2(d)	<ul> <li>Provide for the protection of offset sites containing at least:</li> <li>i. 260 hectares of BGW at Offset Site A (Annexure A) within 18 months of the commencement of construction;</li> <li>ii. 165 hectares of habitat for the Border Thick-tailed Gecko</li> </ul>	Pre-operation	Compliant	Section 4.4 of the approved BOP and the letter in Appendix B of this Annual report, summarise compliance with Condition 2 and 2A, and GIS shapefiles are attached to the email of this Annual report.
	<ul> <li>at Offset Site B (Annexure A), or alternate offset sites for the Border Thick-tailed Gecko agreed in writing by The Minister, within five years of the commencement of operation; and</li> <li>iii. 725 hectares of habitat for the Regent Honeyeater and Swift Parrot at Offset Sites A and B (Annexure A), or alternate offset sites for the Regent Honeyeater and Swift Parrot agreed in writing by The Minister, within five years of the commencement of operation.</li> </ul>			<ul> <li>i. Offset Site A - Windemere Biobanking Agreement (BA379), is owned by SWF. This agreement provides for the protection of 260 ha of BGW. A GIS shapefile of Offset Site A outlining the area of BGW is provided with this Annual report, in the email attachments.</li> <li>ii. Offset Site B – Rockview South Biobanking Agreement (BA376) is owned by a private entity and not by the SWF. In order to achieve compliance with this condition. SWF retired 1.172 Border Thick-tailed</li> </ul>

Number	Condition	Stage	Complianc e Status	Status / Comment
				<ul> <li>Gecko (BTG) credits from Offset Site B. BTG credits on BA376 were generated at 7.1 credits/ha, meaning that retirement of 1,172 credits is equivalent to protecting 165ha of habitat.</li> <li>iii. Offset Site A provides for the protection of 292.28 ha of Regent Honeyeater and Swift Parrot habitat. A GIS shapefile Offset Site A outlining the area of Regent Honeyeater and Swift Parrot is provided with this Annual report, in the email attachments.</li> <li>As Offset Site B is owned by a private entity and not by the SWF, the required area was secured by retiring 3,702 credits. This is equivalent to 432.72 ha at 7.1 credits/ha.</li> <li>By securing 292.28 ha from Offset Site A and 432.72 ha from Offset Site B, a total of 725 ha of Regent Honeyeater and Swift Parrot habitat has been secured</li> </ul>
2	Where an area of habitat is deemed suitable to meet the offset requirements of more than one species or community, the area of habitat may count towards the offset requirements for each species or community.	Pre-operation	Compliant	Note
2A	The approval holder must legally secure Offset Sites A and B (or alternate offset sites agreed in writing by the Minister) in accordance with the approved Package. Evidence of the legal securing of the offset must be provided to the Department within one month of the offset sites being secured including associated GPS coordinates and shapefiles.	Construction	Compliant	Offset Site A (Windemere) has been secured with BioBanking Agreement #379 on 15 January 2019 and was registered over the title. Offset Site B (Rockview South) has been secured with BioBanking Agreement #376 on the 16 January 2019 and registered over title. The Approval Holder has entered into a Biobanking Credit Acquisition Deed to acquire the credits required to meet the conditions of approval from this property. A non-compliance was identified in previous reporting period as evidence of legally securing Offset Sites A and B was not provided within one month. Evidence of legally securing the offset sites was provided to the Department on 1 April 2021 to rectify the non-compliance. At time of preparing this report, a Deed of Variation to the Offset Site A (Windemere) BioBanking Agreement #379 is underway with the Biodiversity Conservation Trust (BCT), to rectify a discrepancy between the amount of the Total Fund

Number	Condition	Stage	Complianc e Status	Status / Comment
				Deposit (TFD) shown in Section 5 of the Agreement and the payment schedule shown in Annexure E of the Agreement. This Deed of Variation does not affect or change the habitat area in hectares for BGW, Regent Honeyeater and Swift Parrot at the Windemere Biobank Site. The Deed of Variation does not affect or change the management actions in the Agreement, therefore it does not change how the approval holder carries out the activities of the Offset Management Plan.
3	The approval holder must provide for The Minister's approval an <b>Offset Management Plan</b> for offset sites specified in the approved Package. The Offset Management Plans (the Plans) must be consistent with the Package, and can only be submitted to The Minister for approval after the Package has been approved by The Minister. A Plan must include:	Pre-operation	Compliant	Per condition 3A the biodiversity offsets are secured under the NSW Biodiversity Banking and Offsets Scheme. The BioBanking Agreements for Offset Sites A (Windemere) and B (Rockview South) address item (a) – (i). The Minister approved the Offset Management Plans (i.e. the Biobanking Agreements of Windemere and Rockview South) on 26 April 2022
3 (a) – (i)	<ul> <li>a qualitative and quantitative analysis of the ecological values of the offset sites in relation to the matter/s being offset;</li> <li>measures to prevent and control pest animal, weed or pathogen incursions, including through edge effects, and feasible measures to eradicate invasive weed species;</li> <li>measures to prevent unauthorised public access;</li> <li>measures to maintain or enhance the values of the offset sites through ecologically sensitive fire regimes;</li> <li>measures to maintain or enhance the offset Site A (Annexure A);</li> <li>measures to maintain or enhance the offset values of Offset Site B (Annexure A);</li> <li>a monitoring and reporting regime for tracking offset conditions and the effectiveness of management measures;</li> <li>an adaptive implementation programme for the Plan; and timeframes for Plan implementation.</li> </ul>	Pre-operation	Compliant	The BioBanking Agreements for Offset Sites A (Windemere) and B (Rockview South) address item (a) – (i).
3	Operation of the action may not commence until Offset Management Plans have been approved in writing by The Minister. The Plans, once approved, must be implemented.	Pre-operation	Compliant	The BioBanking Agreements for Offset Site A (Windemere) and B (Rockview South) were provided to the Minister for

Number	Condition	Stage	Complianc e Status	Status / Comment
3	Note: For convenience, Offset Management Plans for multiple offset sites may be combined.	Pre-operation	Note	approval on 12 October 2021. The Minister's approval was obtained on 26 April 2022.
3A	If, in accordance with the Package, an offset site is to be legally secured under the NSW Biodiversity Banking and Offsets Scheme, the management plan developed under the NSW Biodiversity Banking Agreement for that offset site is an Offset Management Plan for the purposes of Condition 3.	Pre-operation	Compliant	As both Offset Site A (Windemere) and B (Rockview South) have been secured under the NSW Biodiversity Banking and Offset Scheme, the management plans are those that have been developed under the BioBanking Agreements.
4	To compensate for impacts on habitat for the Regent Honeyeater and Swift Parrot, the approval holder must contribute no less than \$250,000 (GST exclusive) in funding towards research by an appropriate institution, to assist in building the body of knowledge regarding how these species interact with, and are impacted by, wind farms. This sum may be donated in five increments of at least \$50,000 to be paid annually, commencing on operation of the action and thereafter on each anniversary of this date until up until the fourth anniversary, with evidence of payment provided to The Department within 30 days of each payment being made. An alternative payment structure may be implemented, following agreement by The Department that the alternate payment structure will realise a benefit to the body of knowledge of the research project/s to be funded. The expected outcomes and milestones of this research project/s must:	Construction	Compliant	<ul> <li>The following payments have been made toward research for the Regent Honeyeater and Swift Parrot:</li> <li>Year 1 \$83,000;</li> <li>Year 2 \$83,000; and</li> <li>Year 3 \$84,000.</li> <li>During the previous reporting period the final payment was made totalling \$250,000, consistent with the payment structure outlined in the approved research project.</li> <li>Non-compliance identified in previous reporting period as notification of payment not completed within 30 days of each payment being made, Evidence of payment was provided to the Department 11 March 2021 to rectify this non-compliance.</li> <li>This Proposal is available upon request to relevant state government agencies and the public. It is also published on the approval holders website.</li> </ul>
4 (a)	be consistent with the relevant Recovery Plans for the species;	Construction	Compliant	
4 (b)	take into account any results from the Bird and Bat Adaptive Monitoring Program referred to in Condition C6 of the NSW Minister for Planning and Environment's approval of the proposed action; and	Construction	Compliant	
4 (c)	be made available to the Department, relevant state government agencies and to the public within 20 business days of their approval and published on the approval holder's website throughout the duration of the research project/s and action.	Construction	Compliant	

Number	Condition	Stage	Complianc e Status	Status / Comment
4	Operation of the action must not commence until the payment structure, expected outcomes and milestones of the research project/s have been approved in writing by the Minister.	Construction	Compliant	The payment structure, expected outcomes and milestones of the research project were approved by the Minister in writing 4 March 2018. The final payment was completed in 2020, consistent with the payment structure outlined in the approved research project.
5	If at any time the NSW Director Generals Assessment Report and approval conditions (June 2013) are modified, the approval holder must notify the Department in writing of the actual date of the modification.	All	Compliant	CWP Renewables (now SQE) notified Commonwealth Minister of the proposed changes to the wind farm and that the NSW DPE has modified the Approval Conditions on 20 June 2016. The NSW Director Generals Assessment Report and approval conditions were not modified during this reporting period.
6	Within 10 days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	Pre- construction	Compliant	The Department was notified 17 December 2016 that commencement of the action occurred 9 December 2016.
7	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Offset Site Management Plan required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Departments website. The results of audits may also be publicised through the general media.	Construction Operation	Compliant	No audits conducted by the Department during the reporting period. SWF, as the approval holder, maintains accurate records substantiating to all activities associated with or relevant to the conditions of approval, including measures taken to implement management plans.
8	By 31 December of <u>each year after the commencement of</u> <u>the action</u> , the approval holder must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of the Management Documents. These compliance reports must remain on the website for 12 months from the date of publishing. Potential or actual non-compliance with any of the conditions of this approval must be reported to the Department in writing within five business days of the approval holder becoming aware of the actual or potential non- compliance.	Construction Operation	Compliant	This report for the reporting period 2023. Non-compliance identified in previous 2020 reporting period as the report addressing compliance with the conditions of approval was not published on the website by 31 December 2020 however was published in early 2021.

Number	Condition	Stage	Complianc e Status	Status / Comment
9	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	All	Compliant	No request from the Minister has been made to conduct an independent audit of compliance.
10	If the approval holder wishes to carry out any activity otherwise than in accordance with the Management Documents as specified in the conditions, the approval holder must submit to the Department for the Minister's written approval a revised version of that Management Document. The varied activity shall not commence until the Minister has approved the varied Management Document in writing. The Minister will not approve a varied Management Document unless the revised Management Document would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised Management Document, that Management Document must be implemented in place of the Management Document originally approved.	All	Compliant	The approval holder has carried out all activities in accordance with the approved Management Documents.
11	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species, listed ecological communities or listed migratory species to do so, the Minister may request that the approval holder make specified revisions to the Management Document specified in the conditions and submit the revised Management Document for the Minister's written approval. The approval holder must comply with any such request. The revised approved Management Document must be implemented. Unless the Minister has approved the revised Management Document, then the approval holder must continue to implement the Management Document originally approved, as specified in the conditions.	All	Compliant	No request from the Minister has been made to revise the Management Documents.
12	If, at any time after five years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without the written agreement of the Minister.	Pre- construction	Compliant	Construction commenced 9 December 2016, within 5 years from the date of the approval (i.e. 5 December 2014).

Number	Condition	Stage	Complianc e Status	Status / Comment
13	Unless otherwise agreed to in writing by the Minister, the approval holder must publish the Offset Plan(s) referred to in these conditions of approval on their website. The Offset Plan(s) must be published on the website within 1 month of being approved by the Minister and remain on the website for the life of the approval.	Construction Operation	Compliant	The BioBanking Agreements for Windermere and Rockview South are published on the website.
14	Unless otherwise agreed to in writing by The Minister, the approval holder must not construct or operate more than 109 wind turbines. Any request to construct or operate more then 109 (and up to 159) turbines must include an analysis of impacts relevant to protected matters, and measures to avoid, mitigate and offset those additional impacts.	Construction Operation	Compliant	Only 75 WTG's have been constructed.

## 4 New Environmental Risks

There have been no significant changes to the activities undertaken on the project site during the reporting period. No new risks to Matters of National Environmental Significant were identified during the reporting period.

# Appendix A Addendum BOP

# Sapphire Wind Farm



# Addendum Biodiversity Offset Package

27 October 2023



### **Revision Control**

Revision	Date	Issue	Author	Reviewed	Approved	Signature
01	12/07/23	Final Draft	Z. Jokadar	J. May	J. May	finge
1.2	27/10/23	Final/Issue d	Z. Jokadar	J. May	J. May	former

#### Confidentiality

This document contains proprietary and confidential information, which is provided on a commercial in confidence basis. It may not be reproduced or provided in any manner to any third party without the consent of Squadron Energy Pty Ltd.

© Copyright Squadron Energy 2023. This work and the information contained in it are the copyright of Squadron Energy Pty Ltd. No part of this document may be reprinted or reproduced without the consent of Squadron Energy Pty Ltd.

#### Disclaimer

Whilst every effort has been made to ensure the accuracy of this information, the publisher accepts no responsibility for any discrepancies and omissions that may be contained herein.

# Contents

1	Introdu	uction	1
1.1	Purpos	e of this document	1
1.2	Project	description	1
2	Backg	round	2
3	Revision of BOP 20165		
4	Conclu	usion 1	0
Appe	ndix A	DPE approval of Variation request	
Appe	ppendix B Variation request letter from SWF to DPE		
Anno	ndix C. Biodiversity Offerst Backage & December 2016		

# Appendix CBiodiversity Offset Package 6 December 2016Appendix DHow BOP2016 and Addendum BOP meet CoA C7 and DPE agreement

### Tables

Table 1 Condition C7 of the NSW Development Consent NSW MP 09-0093 Mod 1	2
Table 2: DPE agreement to variation, 2 December 2017	3
Table 3 only reports those sections of BOP2016 that have to be revised to comply with NSW Conditions of Consent MP 09-003 Modification 1. For ease of reference the BOP2016 is provided in Appendix C, and Table 6 in Appendix D shows where the issues have been addressed in BOP2016 and where they are addressed in this Addendum BOP . Table 3: Detailed revision of the relevant	_
sections of BOP2016	5
Table 4: Ecosystem species credit retirement at Offset Site A and B	9
Table 5: Species credit retirement at Offset Site A and B	9
Table 6 CoA C7 and DPE Agreement 1	5

# Key Terms

Acronym	Definition
BACAR	Biobank Agreement Credit Assessment Report
BC Act	Biodiveristy Conservation Act 2016 (NSW)
ВСТ	Biodiveristy Conservation Trust
BBAM 2014	Biobanking Assessment Methodology 2014
BGW	Box Gum Woodland (i.e. White Box – Yellow Box – Blakely's Red Gum and derived native grassland endangered ecological community)
BOS	Biodiversity Offset Strategy
BOP	Biodiversity Offset Package
BOP2016	Biodiversity Offset Package prepared by ELA and approved by DPE in December 2016
BTF	BioBanking Trust Fund
СоА	Condition of Approval
DAWE	Commonwealth Department of Agriculture, Water and the Environment (now DCCEEW)
DCCEEW	Department of Climate Change, Energy, Environment, and Water
DotE	former Commonwealth Department of the Environment (now DAWE)
DPE	NSW Department of Planning and Environment
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
ELA	Eco Logical Australia Pty Ltd
FBA	Framework for Biodiversity Assessment
OEH	NSW Office of Environment and Heritage (now BCT)
Offset Site A	Windemere Biobank Agreement BA379
Offset Site B	Rockview South Biobank Agreement BA 376
Total Fund Deposit	The Total Fund Deposit
TSC Act	Threatened Species and Conservation Act 1995 (repealed by the BC Act)

# 1 Introduction

### **1.1 Purpose of this document**

Before starting construction, Sapphire Wind Farm Pty Ltd (the Proponent) prepared a Biodiversity Offset Package (ELA, 2016) (BOP2016) in December 2016 for the Sapphire Wind Farm Project (SWF). The BOP2016 explained how the CoA C7 biodiversity offset requirements in the NSW Condition of Consent NSW MP 09-0093 Mod 1 would be met and when the credits would be retired. The Secretary of the NSW Department of Planning and Environment (DPE) approved the BOP2016 in December 2016 and agreed to defer the retirement of credits for up to five years from the commencement of operation (Appendix A). The Secretary also recognized that the final credit calculations would be revised after the formal registration of two proposed offset areas as Biobanking Sites.

The SWF began operation in November 2018, and the Biobanking sites, Rockview South BA376 (Offset Site B) and Windemere BA379 (Offset Site A) were registered in January and February 2019, respectively. Pursuant with the letter from DPE dated 2 December 2016 (Appendix A), this document provides an update to the SWF...

### 1.2 Project description

SWF is located 28 km east of Inverell and 18 km west of Glen Innes in the Northern Tablelands of NSW. The Project is in its operational phase after completing construction in late 2018 and consists of 75 wind turbine generators (WTG) with a generation capacity of 270MW. The biodiversity impact footprint following construction and micro-siting is 100.29ha.

Development Consent was granted by the NSW Planning Assessment Commission (09\_0093) on 26 June 2013 and later modified on the 30 June 2016. The offsets required under the NSW MP 09-0093 Mod 1 approval are based on the construction of 109 WTGs and biodiversity impact area of 126.7ha.

The Minister for Environment and Energy granted approval of SWF on 5 December 2014 with conditions covered by EPBC 2011/5845. Variations to the EPBC approval were granted on 11 June 2018 and 4 March 2018. The approval holder is SWF1 Operations Pty Ltd (ACN 601 425 316), SWF2 Operations Pty Ltd (ACN 601 425 325) and SWF3 Operations Pty Ltd (ACN 601 425 334).

# 2 Background

CoA C7 of the NSW Development Consent NSW MP 09-0093 Mod 1 requires the Proponent to retire biodiversity credits of a number and class specified in Tables 1a and 1b of the Development Consent, to the satisfaction of Biodiversity Conservation Trust (BCT) (previously OEH). Table 1 details CoA C7 and describes how the condition will be met.

Table 1 Condi	tion C7 of the	NSW Development	Consent NSW MP	09-0093 Mod 1
---------------	----------------	-----------------	----------------	---------------

Condition ID	Requirement	How condition is met
C7	Within 12 months of the commencement of construction, unless otherwise agreed by the Secretary, the Proponent shall retire biodiversity credits of a number and class specified in Tables 1A and 1B below to the satisfaction of OEH ( <i>now BCT</i> ).	On 11 November 2016 the Proponent provided a letter to DPE summarising the proposed Biodiversity Offset Package and requesting the Secretary to vary the timing to retire the biodiversity credits up to 5 years from commencement of operation. On 2 December 2016 the Secretary accepted the request to vary the timing by 5 years from commencement of operation (i.e. November 2023). The credits listed in Table 1A and Table 1B will be retired from Offset Site B and Offset Site A by 1 November 2023.
	<ul> <li>The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects, and can be achieved by:</li> <li>Acquiring or retiring credits under the biobanking scheme in the TSC Act;</li> <li>Making payments into an offset fund that has been established by the NSW Government; or</li> <li>Providing suitable supplementary measures.</li> </ul>	The retirement of the credits will be achieved by retiring credits under the biobanking scheme in the TSC Act. Rockview South BA376 and Windemere BA379 were established under the TSC Act and the sites were formally registered in January and February 2019, respectively. Table 4 and Table 5 shows which ecosystem credits and species credits will be sourced from Offset A and Offset B to meet the credits required for offset as specified in CoA C7 Table 1A and Table 1B. Table 4 and Table 5 of this Addendum BOP, details the number and type of credits that will be sourced from Offset Site B and Offset Site A to fulfill the required ecosystem and species credits listed in Table 1A and Tabl1B.
	Note: In accordance with the credit profile agreed in Appendix 11 of the EA, Blakely's Red Gum – Yellow Box may be used to offset impacts to Manna Gum vegetation type.	Noted

In November 2016, the Proponent provided a letter to DPE advising that a BOP would be prepared to meet the Commonwealth offset requirements (EPBC Condition 2), outlining the Project's proposed approach to delivering the credits under CoA C7; and requesting a variation of the credit requirements (see Appendix B). The matters identified in the letter included the following:

- The project will satisfy the biodiversity obligations by utilizing two Biobanking sites, namely Windemere (Offset Site A) and Rockview South (Offset Site B).
- The Proponent will take ownership and manage Offset Site A, while entering into a BioBanking Credit Acquisition Deed with the owner of Rockview South to purchase and retire credits for the Project.
- The credits from the combined Biobank Sites will fulfill the credit offset requirements specified in Table 1A and Table 1B of CoA C7.
- Justification for deferring the full payment of the Total Fund Deposit until year 7 of the management actions at the biobank sites, year 1 being 2016. Moreover, additional biodiversity credits will be retired from Offset Site A, even if not required by the CoA C7.

Black Cypress Pine credits required under the CoA C7 are suggested to be interchangeable with the Black Cypress PCT at Offset Site B. On 2 December 2016, after reviewing the draft BOP2016 and consulting with the BCT, the DPE agreed to the proposed variation (see Appendix A).Table 2 details the matters identified in DPE's conditions of agreement and how the Proponent has addressed them.

Subject	Text	How condition is met
Timing of credit retirement	The Department agrees to vary the timing for retirement of the biodiversity credits such that they may be retired up to 5 years after the commencement of operations subject to the preparation of a Biodiversity Offset Package that specifically addresses the matters identified in your letter dated 25 November 2016 and the items below	The SWF commenced operation in November 2018. As such the retirement of credits must be completed by November 2023. SWF will be submitting the application to retire credits from Offset Site A and B, as described in Table 4 and Table 5 shows which ecosystem credits and species credits will be sourced from Offset A and Offset B to meet the credits required for offset as specified in CoA C7 Table 1A and Table 1B. Table 4 and Table 5 by October 2023, to ensure there is sufficient time for the Biodiversity Conservation Trust (BCT) to process the applications.
Preparation of a Biodiversity Offset Package (BOP)	<ul> <li>The package must be prepared in consultation with OEH and submitted to the Secretary for approval, prior to the commencement of construction. At a minimum, the package must:</li> <li>be prepared in accordance with Stage 3 of the Framework for Biodiversity Assessment (FBA) including the requirements set out in Table 22 of the FBA;</li> <li>include a commitment to fund and implement the active management of both the Windemere and Rockview South offset sites for the period between the commencement of construction and the retirement of credits;</li> <li>describe the mechanisms by which the credits would be retired, including a schedule for the proposed deferred payment structure to the BioBanking Trust Fund; and</li> </ul>	<ul> <li>7 December 2016 a final BOP2016 was submitted to DPE (see Appendix C). The BOP2016 was prepared in accordance with Stage 3 of the FBA and included details on the issues raised by this condition.</li> <li>9 December 2016 construction of SWF commenced</li> </ul>

### Table 2: DPE agreement to variation, 2 December 2017

Subject	Text	How condition is met
	<ul> <li>detail the proposed management and monitoring of the offset sites, including provisions for the annual review and reporting of the monitoring outcomes to both the Department and OEH for the period between the commencement of construction and the retirement of credits.</li> </ul>	
Revision of the BOP	The Department recognises that the final credit calculation and details of the active management and monitoring of both offset sites would need to align with the management plans for these sites approved as part of the applicable BioBanking Agreements. Accordingly, the Department recognises that the package to be submitted prior to construction would be subject to revision following formal registration of the offset areas as BioBanking sites.	The Biobanking Agreement for Offset Site A – Windemere Biobank BA 379 was executed on 15 February 2019. The Biobanking Agreement for Offset Site B – Rockview South Biobank BA 379 was executed on 16 January 2019. The final credit calculations and detailed Active Management and monitoring plans are provided in each executed biobanking agreement. The management plans, as detailed in the Biobanking agreements, have been implemented at Offset Site A and Offset site B since November 2016. Annual management reports have been submitted to BCT, and the BCT have conducted annual site compliance visits at each Offset Site. This Addendum BOP is the revision of the approved BOP2016,
Interchangeable credits	The Black Cypress Pine credits required under condition C7 are interchangeable with the Black Cypress Pine PCT credits proposed to be retired from the proposed Rockview South offset site	Offset Site B provides 308.94 ha (3,676 credits) of Black Cypress Pine. SWF will acquire and retire 9 credits as required by CoA C7 Table 1A.
Regent HoneyEater Expert Report	OEH supports the provision of an expert report by Dr Stephen Debus for the regent honeyeater, as per the FBA requirements.	Expert reports was prepared for Offset Site A and B by Dr Stephen Debus, dated 8 March 2017.

# 3 Revision of BOP 2016

Table 3 only reports those sections of BOP2016 that have to be revised to comply with NSW Conditions of Consent MP 09-003 Modification 1. For ease of reference the BOP2016 is provided in Appendix C, and Table 6 in Appendix D shows where the issues have been addressed in BOP2016 and where they are addressed in this Addendum BOP . Table 3: Detailed revision of the relevant sections of BOP2016

Section in BOP2016	Text from BOP2016	Revision
2.1 Offset Site A 2.1.2 Biodiversity Values	ELA have undertaken a vegetation assessment of the property and have mapped three plant community types (PCTs) in seven condition classes (vegetation zones) (Figure 4). After exclusion of the homestead paddock and powerline easements, there is 288.59 ha of BioBank area available that will generate an estimated 2,597 ecosystem credits (based on vegetation condition and the 'averted loss' score for the zoning of the property) (Table 2). There is also an additional 6.9 ha that is legally part of the property but due to the 'give and take' nature of the existing boundary fence, will not form part of the registered BioBank area.	<ul> <li>Offset Site A covered by the biobank agreement consists of approximately 292.28 hectares and generates 3,330 ecosystem credits. These ecosystem credits comprise:</li> <li>252.44 ha (2,920 credits) of Blakely's Red Gum - Yellow Box grassy woodland of the New England Tableland Bioregion</li> <li>21.40 ha (224 credits) of Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion</li> <li>18.44 ha (186 credits) of White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion</li> <li>Offset Site A also includes the following species credits:</li> <li>14,200 Austral Toadflax (<i>Thesium austral</i>)</li> <li>2,075 Koala (<i>Phascolarctos cinereus</i>)</li> <li>50 Blackbutt Candlebark (<i>Eucalyptus rubida subsp. barbigerorum</i>)</li> <li>2,075 Regent Honeyeater (<i>Anthochaera phyrgia</i>)</li> </ul>
2.1.4 Management Actions and Costs	Conservation management costings of the proposed BioBank have been undertaken which estimates that \$1.3M will be required for the in perpetuity conservation management of the proposed BioBank site. () Five years after the commencement of operations (expected to be year 6 of the BioBank Agreement), the Total Fund Deposit amount (TFD) will be recalculated to determine the sum of funds required to provide for the ongoing management of the BioBank site. The recalculation of funds will take into account the management actions undertaken at the property, and the costs incurred for those actions. It is expected that the remaining TFD	The Total Fund Deposit for Offset Site A is \$1,601,222 excluding GST. This sum will be paid when the required credits are retired by November 2023; which is within the 5 year period from commencement of operations (operations commenced November 2018). Active conservation management of Offset Site A has been ongoing since December 2016 and annual passive monitoring report have been submitted to the Biodiversity Conservation Trust annually since the commencement of these management actions.

Section in BOP2016	Text from BOP2016	Revision
	will be approximately \$1.0M after the payment of management cost in years one to six. Based on the current schedule this sum will be payable by the Project by July 2023	
2.2 Offset Site B 2.2.2 Biodiversity Values	ELA have undertaken a vegetation assessment of the property and have mapped six plant community types (PCTs) in 12 condition classes (vegetation zones) (Figure 8). After exclusion of the homestead paddock and a formed road and access easements to neighbouring properties, there is 478.71 ha of BioBank area available that will generate an estimated 4,787 ecosystem credits (based on vegetation condition, a BioBank site in a 'strategic location' (a third order creek line) and the 'averted loss' score for the zoning of the property) (Table 2).	<ul> <li>Offset Site B covered by the biobank agreement consists of approximately 478.27 hectares and generates 5,604 ecosystem credits. These ecosystem credits comprise:</li> <li>308.94 ha (3,676 credits) of Black Cypress Pine - Orange Gum - Tumbledown Red Gum shrubby woodland on granites of the Nandewar Bioregion and New England Tableland Bioregion</li> <li>58.09 ha (654 credits) of Rough-barked Apple - White Cypress Pine - Blakely's Red Gum riparian open forest / woodland of the Nandewar Bioregion and New England Tableland Bioregion</li> <li>85.53 ha (970 credits) of Silvertop Stringybark - Rough-barked Apple - Eucalyptus quinniorum shrubby open forest of southern Nandewar Bioregion and New England Tableland Bioregion</li> <li>5.51 ha (62 credits) Tea-tree riparian shrubland / heathland wetland on drainage areas of Nandewar Bioregion and New England Tableland Bioregion</li> <li>20.20 ha (242 credits) White Cypress Pine - Silver-leaved Ironbark - Caley's Ironbark open forest of the central Nandewar Bioregion and western New England Tableland Bioregion</li> <li>20.801 Border Thick-tailed Gecko (<i>Uvidicolus sphyrurus</i>)</li> <li>3,550 Granite Homaranthus (<i>Homoranthus prolixus</i>)</li> <li>3,357 Regent Honeyeater (<i>Anthochaera phyrgia</i>)</li> </ul>
2.2.4 Management Actions and Costs	To facilitate this, the Project will implement and fund the management actions for those credits being retired for the Project, from one year after the commencement of construction until the credits are retired, using the trust fund deposit calculations for the BioBank site. These payments (Refer to Appendix F) are estimated at: o December 2017 - \$47,809 o December 2018 - \$41,859 o December 2019 - \$23,859	The Total Fund Deposit for Offset Site B is \$1,359,298 excluding GST. This sum will be paid when the required credits are retired by November 2023; which is within the 5 year period from commencement of operations (operations commenced November 2018). During the deferred credit retirement period, SWF has paid \$794,639.00 to fund the management actions. As such the credit price of the species credits that will be acquired is \$506.22. Active conservation management of Offset Site B has been ongoing since November 2016 and annual passive monitoring report have been submitted,

Section in BOP2016	Text from BOP2016	Revision
	o December 2020 - \$24,009 o December 2021 - \$18,859 o December 2022 - \$19,414 The remaining TFD sum for the entire Rockview BioBank site, following the six years of management, has been estimated at \$1.5M resulting in an estimated ecosystem credit price of approximately \$330 each (Refer to BioBanking in perpetuity management cost spreadsheet in Appendix F). However, to meet the EPBC Act approval offset requirement, only 4,365 ecosystem credits will be required (costing approximately \$1.440M). In addition, 3,099 Regent Honeyeater and 1,172 Border Thick-tailed Gecko species credits will also need to be purchased and retired. As the EPBC Act 'habitat' credits for these species will already met by the retirement of ecosystem credits, a nominal cost of \$1 each has been applied (i.e. \$1,172 for Thick-tailed Gecko and \$3,099 for Regent Honeyeater). The total cost to secure the offset requirements from the Rockview South BioBank site (Offset Site B) is therefore estimated at \$1.621M (which includes the six active management navments totalling \$176 000 the	by the owners of Offset Site B, to the Biodiversity Conservation Trust annually since the commencement of these management actions.
	\$1.440M to purchase the required number of ecosystem credits and \$4,271 for the species credits) which will be payable by July 2023. Any remaining credits will be retained by the owner of Rockview South.	
3.1.1 Ecosystem Requirements	All NSW ecosystem credits will be met at Offset Site A (Windemere), except for 9 credits of 'Black Cypress Pine – Tumbledown Gum – Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion', which will be met at Offset Site B (Rockview South). Surplus to the NSW requirement, approximately 200 credits of Blakely's Red Gum – Yellow Box grassy woodland will also be retired at Windemere under the deferred credit retirement approach. All of the Commonwealth vegetation requirement of Box Gum Woodland will be met at Windemere (265 ha of the 260 ha requirement). Rockview South provides an additional 58.6 ha of Box Gum Woodland, which provides part of the Regent Honeyeater habitat requirements, which will also be retired.	<ul> <li>All the NSW ecosystem credits required to be offset as shown in MP09-0093 Mod 1 Conditions of Consent C7 Table1A will be met by retiring the following ecosystem credits from Offset A and Offset Site B:</li> <li>1,991 credits of Blakely's Red Gum - Yellow Box grassy woodland of the New England Tableland Bioregion</li> <li>224 credits of Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion</li> <li>186 credits of White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion</li> <li>9 credits of Black Cypress Pine - Orange Gum - Tumbledown Red Gum shrubby woodland on granites of the Nandewar Bioregion and New England Tableland Bioregion</li> </ul>

SWF will retire an additional 200 credits of Blakely's Red Gum – Yellow Box grassy woodland from Offset Site A.

Section in BOP2016	Text from BOP2016	Revision
		Refer to Table 4 and Table 5 shows which ecosystem credits and species credits will be sourced from Offset A and Offset B to meet the credits required for offset as specified in CoA C7 Table 1A and Table 1B.
		Table 4 for a detailed breakdown of how each Offset Site will provide the required credits.
3.1.2 Species Requirements	Windemere provides around 55% of the NSW Regent Honeyeater species credits (2,049 of the 3,708 required species credits) and 40% (288.6 of 725 ha) of the Commonwealth Regent Honeyeater and Swift Parrot habitat requirements. The remaining 45% of Regent Honeyeater credits will be met at Rockview South, as well as all of the remaining Commonwealth requirements for Regent Honeyeater and Swift Parrot habitat (an additional 473 ha of which only 436.4 ha is required). Rockview South will provide all habitat required for the Border Thick-tailed Gecko (309 ha of which only 165 ha is required) under the Commonwealth approval. SWF has committed to retire any additional credits generated at Windemere which are not required under the approval, under the agreed proposal for deferred credit retirement and implementation of the management requirements in advance. Species credits to be retired include Koala and Swainsona sericea. Any surplus credits generated at Rockview South will be retained by the owner.	SWF will be acquiring from Offset Site B 3,072 Regent Honeyeater credits. Offset Site A will provide the remaining 636 credits to fulfill the 3,708 Regent Honeyeater credit requirement of MP09-0093 Mod 1 Conditions of Consent C7 Table 1B (see Table 5). SWF will retire all the Koala and Austral Toadflax credits from Offset Site A.

Table 4 and Table 5 shows which ecosystem credits and species credits will be sourced from Offset A and Offset B to meet the credits required for offset as specified in CoA C7 Table 1A and Table 1B.

Table 4: Ecosystem species credit retirement at Offset Site A and B

Biometric vegetation Type	Offset Site Vegetation type	NSW MP09-0093 Mod 1 Table 1A		Credits to	Credit
	-	Impacts (ha)	Credit Required	be retired	Source
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions		3.68	97		
Moderate to Good / Woodland					
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	White Box grassy woodland on the Inverell Basalts in the Nandewar	0.29	2	186	
Low / Paddock trees	biologion				
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions		6.73	106		
Moderate to Good / Native Pasture					
Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	1.30	19	1,991	
Moderate to Good / Native Pasture					Offset
Manna Gum - Rough-barked Apple - Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast		44.48	1,274	224	Site A
Moderate to Good / Woodland					
Manna Gum - Rough-barked Apple - Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tablelands and NSW North Coast	22.40	261		
Manna Gum - Rough-barked Apple - Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast		47.34	642		
Black Cypress Pine - Tumbledown					
Gum - Narrow- leaved Ironbark open forest of northern parts of the Nandewar Bioregion	Black Cypress Pine - Orange Gum - Tumbledown Gum shrubby woodland	0.49	9	9	Offset Site B
Moderate to Good / Native Pasture					
	Total	126.71	2,410	2,410	

### Table 5: Species credit retirement at Offset Site A and B

Species	NSW MP09-0093 Mod 1 Table 1B	Credits available	Credits to be retired	Credit Source
Regent Honeyeater and swift parrot		2,075	636	Offset Site A
	3,708	3,357	3,072	Offset Site B
Total			3,708	

# 4 Conclusion

Sapphire Wind Farm Pty Ltd prepared a Biodiversity Offset Package (BOP2016) for the Sapphire Wind Farm Project (SWF) in December 2016. The NSW DPE approved the BOP2016, deferring credit retirement for up to five years from commencement of operation and recognising that the BOP2016 would be revised once final credit calculations were obtained after registering Offset Site A and B as Biobanking Sites.

SWF has successfully secured biodiversity offsets to meet the requirements of CoA C7 and the DPE agreement letter by:

- 1. Establishing Rockview South BA376 (Offset Site B) and Windemere BA379 (Offset Site A) under the TSC Act and registering the sites in January and February 2019, respectively
- 2. Owning and managing Offset Site A and having a BioBanking Credit Acquisition Deed with the owner of Rockview South to purchase and retire credits.

SWF will successfully fulfill its compliance obligations with the requirements of CoA C7, as follows:

- 1. CoA C7 Table 1B requires that 2,410 ecosystem credits are retired by SWF.
  - a. Offset Site A will provide:
    - i. 186 credits of White Box grassy woodland on the Inverell Basalts in the Nandewar Bioregion.
    - ii. 224 credits of Ribbon Gum Rough-barked Apple Yellow Box grassy woodland of the New England Tablelands and NSW North Coast
    - iii. 1,991 credits of Blakely's Red Gum Yellow Box grassy open forest or woodland of the New England Tablelands
  - b. Offset Site B will provide 9 credits of Black Cypress Pine
- 2. CoA C7 Table 1B requires that 3,708 Regent Honeyeater credits are retired by SWF.
  - a. Offset Site B will provide 3,072 Regent Honeyeater credits.
  - b. Offset Site A will provide the remaining 636 credits.
- SWF will retire an additional 200 credits of Blakely's Red Gum Yellow Box grassy woodland from Offset Site A.
- 4. SWF will retire all the Koala and Austral Toadflax credits from Offset Site A

Table 1 and Table 2 shows how the BOP2016 and Addendum BOP have met the CoA C7 and DPE agreement requirements and Table 3 reports those sections of BOP2016 that have been revised to comply with NSW Conditions of Consent MP 09-003 Modification 1

Table 4 and Table 5 shows the final credit calculation of each site and shows how the Ecosystem and Species credits will be sourced from each Biobank Site to meet the credit offsets required in Table 1A and Table 1B of CoA C7.

# Appendix A DPE approval of Variation request



 Resource Assessments

 Contact:
 Phillipa Duncan

 Phone:
 9274 6451

 Email:
 phillipa.duncan@planning.nsw.gov.au

Mr Mark Branson CWP Renewables Pty Ltd PO Box 1708 NEWCASTLE NSW 2300

Dear Mr Branso

### Sapphire Wind Farm (MP 09\_0093) Condition C7 – Retirement of Credits

I refer to our recent meeting and your correspondence dated 25 November 2016 requesting a variation of the timing for retirement of the biodiversity credits required for the Sapphire Wind Farm under condition C7 of the project approval.

The Department has considered your request and undertaken further consultation with the NSW Office of Environment and Heritage (OEH) on this matter.

Accordingly, the Department agrees to vary the timing for retirement of the biodiversity credits such that they may be retired up to 5 years after the commencement of operations subject to the preparation of a Biodiversity Offset Package that specifically addresses the matters identified in your letter dated 25 November 2016 and the items below.

The package must be prepared in consultation with OEH and submitted to the Secretary for approval, prior to the commencement of construction.

At a minimum, the package must:

- be prepared in accordance with Stage 3 of the Framework for Biodiversity Assessment (FBA) including the requirements set out in Table 22 of the FBA;
- include a commitment to fund and implement the active management of both the Windemere and Rockview South offset sites for the period between the commencement of construction and the retirement of credits;
- describe the mechanisms by which the credits would be retired, including a schedule for the proposed deferred payment structure to the BioBanking Trust Fund; and
- detail the proposed management and monitoring of the offset sites, including provisions for the annual review and reporting of the monitoring outcomes to both the Department and OEH for the period between the commencement of construction and the retirement of credits.

The Department recognises that the final credit calculation and details of the active management and monitoring of both offset sites would need to align with the management plans for these sites approved as part of the applicable BioBanking Agreements. Accordingly, the Department recognises that the package to be submitted prior to construction would be subject to revision following formal registration of the offset areas as BioBanking sites.

The Department has also received confirmation from OEH that:

- the Black Cypress Pine credits required under condition C7 are interchangeable with the Black Cypress Pine PCT credits proposed to be retired from the proposed Rockview South offset site; and
- OEH supports the provision of an expert report by Dr Stephen Debus for the regent honeyeater, as per the FBA requirements.

If you wish to discuss this matter further, please contact Phillipa Duncan on 9274 6451.

Yours sincerely

chell 2.12.16. Mike Young

Director **Resource Assessments** (as the Secretary's nominee)

# Appendix B Variation request letter from SWF to DPE

# Sapphire Wind Farm

Delivering Energy. Powering Communities.

25 November 2016

Mike Young Director Resource Assessments Department of Planning & Environment *By email.* 

Dear Mike,

### Sapphire Wind Farm – Consent Condition C7: Biodiversity Offset

CWP Renewables, on behalf of Sapphire Wind Farm Pty Ltd (the Proponent), is finalising arrangements for the purchase and retirement of biodiversity credits in accordance with Condition of Approval (CoA) C7 for Sapphire Wind Farm (the Project). As you are aware, the Project is also required to deliver a Biodiversity Offset Package (the Package) to meet the Commonwealth offset requirements. The Package was provided to the Department of Planning and Environment (DPE) and the Office of Environment and Heritage (OEH) for review on September 29, 2016, outlining the proposed approach to meet the credit requirements under CoA C7. The overall cost of the package will be around \$5.5M AUD.

This letter provides a summary of the Package, outlining the Project's proposed approach to delivering the credits under CoA C7 and a request for variation of the credit requirements.

### **Offset Sites**

The project proposes to use two properties to meet the credit requirements under CoA C7:

### Offset Property A: Windemere (316 hectares)

The Project will own and manage Windemere as a BioBank site. Windemere will provide nearly all credits required under CoA C7, and all offsets required within one year of construction under the Commonwealth approval. The Project currently holds an option to purchase the property, and this option will be executed in early December 2016.

### Offset Property B: Rockview South (484 hectares)

The Project has a signed BioBanking Credit Acquisition Deed with the owner of Rockview South, allowing the proponent to register the BioBank site, purchase credits and retire credits for the Project. Rockview South will be used for Commonwealth offsets required five years after the commencement of operations, and 45% of the Regent Honeyeater credits and 9 ecosystem credits required under CoA C7.

Both properties will be registered as BioBank sites in 2017 under the current legislation. BioBanking Assessments are currently underway and the final credit calculations are expected to be available in Q1 2017, when the formal registration process will commence.

### **Credits Required**

The credits required under CoA C7 are shown in Table 1A and 1B. The column to the right identifies whether the proposed offset package can meet the requirements.

Biometric Vegetation Type	Biometric Condition / Structure	Impact Area (ha)	Credits Required	Does the offset package meet the requirement?
Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Moderate to Good / Native Pasture	1.30	19	Yes
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Moderate to Good / Native Pasture	6.73	106	Yes
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Low / Paddock trees	0.29	2	Yes
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Moderate to Good / Woodland	3.68	97	Yes
Manna Gum – Rough-barked Apple – Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Moderate to Good / Native Pasture	47.34	642	Yes
Manna Gum – Rough-barked Apple – Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Low / Paddock trees	22.40	261	Yes
Manna Gum – Rough-barked Apple – Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Moderate to Good / Woodland	44.48	1,274	Yes
Black Cypress Pine – Tumbledown Gum – Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion	Moderate to Good / Native Pasture	0.49	9	Requires consideration under the transitional provisions
Total		126.71	2,410	

Table 1A – Ecosystem	credit requirements
----------------------	---------------------

### Table 1B – Species credit requirements

Species	Potential Habitat Impact (ha)	Credits Required	
Regent Honeyeater	48	3,708	

Does the offset package meet the requirement?

Requires delay in retiring around 45% of credits.

### **Ecosystem Credits**

As shown in Table 1A above, Windemere is expected to meet all ecosystem credit requirements for the Project, except for 9 credits of *Black Cypress Pine – Tumbledown Gum – Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion*.

Using the original BioBanking Assessment Methodology this Plant Community Type (PCT) can be used to offset impacts at the Project site. The Framework for Biodiversity Assessment has changed the PCT interchange provisions and the PCT at Rockview South is not in an adjacent IBRA subregion to the Project site. As identified in the Construction Flora and Fauna Management Plan, this community will no longer be impacted by the 75 turbine Project. However, over 3000 credits of a similar PCT will be retired at Rockview South to meet Commonwealth offset requirements for Border Thick-tailed Gecko.

The Project is requesting the Secretary vary the timing of credit retirement, and allow interchangeability of this PCT under the transitional rules in the Biodiversity Offsets Policy for Major Projects.

### **Species Credits**

Windemere is expected to provide approximately 2,049 (55%) of the 3,708 Regent Honeyeater species credits required under CoA C7. Rockview South will provide the remaining approximately 1,659 (45%), and the property is considered to provide good quality foraging habitat adjacent to three existing private and public reserves, and occurs near the known Bundarra-Barraba breeding range for the species.

The Project is requesting the Secretary vary the timing of credit retirement for those species credits which can not be met at Windemere, to five years after the commencement of operations, consistent with the Commonwealth approval.

### Deferred Payments to the BioBanking Trust Fund

Wind farms require significant upfront capital investment at the commencement of construction, with returns being made over a 25-30-year Project lifecycle. To manage the cost of implementing a considerable dual offset package worth over \$5.5M, the Project is proposing to defer the BioBanking Trust Fund Deposit for both BioBank sites.

The proposed deferred payment would involve:

- Years 1-6: The Project will make annual management payments from Project revenues to implement the BioBank management actions, in accordance with the TFD calculations;
- Year 7: the TFD balance will be recalculated considering the management actions and costs to date, in consultation with OEH, and the TFD deposit made to the BioBanking Trust Fund.

The Project is backed by a 20-year Power Purchase Agreement (PPA) with the ACT Government which provides security of revenue for the TFD. The Project will also offer the Windemere property as additional security for the TFD. This approach has successfully been adopted at Boco Rock Wind Farm over a longer timeframe and is proof of the success of the model.

OEH has provided recent advice in relation to deferred payments and the Project meets all criteria for a deferred payment structure for the Windemere property, as discussed in the Package.

The Rockview South landowner has negotiated that sale of credits is subject to management actions commencing in year 1 (2017), despite the Commonwealth offset not being required until year 7. The deferred payment schedule would allow the BioBanking Management Actions for the entire Rockview property to commence in year 1, and manage the cash-flow impacts on the Project.

Under this structure, the following credits which are not required for the Project will also be retired under the package:

- 200 credits for Blakely's Red Gum Yellow Box credits also generated at Windemere.
- All Koala (Phascolarctos cinerea) credits generated at Windemere
- All Swainsona sericea credits generated at Windemere

The biodiversity package will exceed the requirements under both Commonwealth and NSW approvals. To manage the economic viability of the Project, the following variation is requested.

### Request for the Secretary

The Proponent requests that the Secretary agree to vary the requirement under CoA C7 to facilitate the progress of the Project, as follows:

- 1. Black Cypress Pine credits required under CoA C7 be considered interchangeable with the Black Cypress Pine PCT at Rockview South.
- 2. Ecosystem and species credits which can not be generated by the Windemere property (i.e. Black Cypress Pine ecosystem credits and a portion of the Regent Honeyeater species credits), be permitted to be retired up to five years after the commencement of Operations (i.e. consistent with the Commonwealth offset requirement).
- 3. The deferred TFD payment structure be accepted, backed by the 20-year ACT Government PPA, to allow the Project to deliver the Package at both Windemere and Rockview South.

Thankyou for your consideration of this request.

Yours sincerely,

Flbory

Edward Mounsey CWP Renewables Pty Ltd ed.mounsey@cwprenewables.com.au Mob: 0428 998 311
### Appendix C Biodiversity Offset Package 6 December 2016



### Sapphire Wind Farm

### **Biodiversity Offset Package**

Prepared for CWP Renewables Pty Ltd

December 2016



#### **DOCUMENT TRACKING**

ltem	Detail
Project Name	Sapphire Wind Farm Biodiversity Offset Package
Project Number	16SUT-4498
Project Manager	Robert Humphries Phone 02 8536 8620 Sutherland
Prepared by	Robert Humphries
Reviewed by	Bruce Mullins
Approved by	Robert Humphries
Status	Final
Version Number	4
Last saved on	6 December 2016
Cover photo	(from top left clockwise) Landscape view of Rockview South, Regent Honeyeater, Border Thick-tailed Gecko, exfoliating granite outcrops at Rockview South (Gecko shelter), Caley's Ironbark (Regent Honeyeater foraging habitat).

This report should be cited as 'Eco Logical Australia 2016. Sapphire Wind Farm Biodiversity Offset Package. Prepared for CWP Renewables Pty Ltd, 06 December 2016'.

#### ACKNOWLEDGEMENTS

This document has been prepared by Eco Logical Australia Pty Ltd with support from Ed Mounsey and Mark Branson of CWP Renewables.

#### Disclaimer

This document may only be used for the purpose for which it was commissioned and in accordance with the contract between Eco Logical Australia Pty Ltd and CWP Renewables. The scope of services was defined in consultation with CWP Renewables, by time and budgetary constraints imposed by the client, and the availability of reports and other data on the subject area. Changes to available information, legislation and schedules are made on an ongoing basis and readers should obtain up to date information.

Eco Logical Australia Pty Ltd accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report and its supporting material by any third party. Information provided is not intended to be a substitute for site specific assessment or legal advice in relation to any matter. Unauthorised use of this report in any form is prohibited.

Template 29/9/2015

## Contents

1	Background	. 1
1.1	NSW Offset Requirements	. 1
1.2	Commonwealth Offset Requirements	. 3
1.3	Proposed Biodiversity Offset Package	. 5
1.4	Purpose of Document	. 5
2	Offset Areas and Biodiversity Values	.7
2.1	Offset Site A - Windemere	.7
2.1.1	Description and current management	.7
2.1.2	Biodiversity Values	.7
2.1.3	Assessment and Registration	. 8
2.1.4	Management Actions and Costs	. 8
2.2	Offset Site B - Rockview South	. 9
2.2.1	Description and current management	. 9
2.2.2	Biodiversity Values	. 9
2.2.3	Assessment and Registration	11
2.2.4	Management Actions and Costs	11
3	Meeting Offset Requirements and Costs	22
3.1	Offset Requirements	22
3.1.1	Ecosystem Requirements	22
3.1.2	Species Requirements	22
3.2	Cost to secure offsets and staging of payments	22
3.2.1	Offset Site A - Windemere	22
3.2.2	Offset Site B – Rockview South	22
4	Summary	27
4.1	Purpose of Offset Package	27
4.2	Offset Properties and Biodiversity Values	27
4.3	How Offset Package meets the NSW offset requirements	27
4.4	How Offset Package meets Commonwealth offset requirements	28
4.5	Offset Management Plan	29
4.6	Offset Package Commitments	30
Refere	nces	32
Appen	dix A NSW Approval	33
Appen	dix B Commonwealth Approval	33

Appendix C Proponent request for variation to credit retirement timing	33
Appendix D NSW approval of variation to Condition C7	33
Appendix E In Perpetuity Management Cost Estimates - Windemere	33
Appendix F In Perpetuity Management Cost Estimates - Rockview South	33

# List of figures

Figure 1: Location of proposed offset properties in relation to the Sapphire Windfarm	6
Figure 2: Offset Site A Property Boundary - Windemere	13
Figure 3: Potential BioBank Area available at Windemere	14
Figure 4: Vegetation mapping of Windemere	15
Figure 5: Regent Honeyeater and Swift Parrot foraging habitat at Windemere	16
Figure 6: Offset Site B Property Boundary – Rockview South	17
Figure 7: Rockview South property context	18
Figure 8: Vegetation mapping of Rockview South	19
Figure 9: Regent Honeyeater and Swift Parrot breeding and foraging habitat at Rockview South	20
Figure 10: Border thick tailed Gecko habitat and records on and adjacent to Rock view South	21

### List of tables

Table 1: The number and types of biodiversity credits to be retired in accordance with the NSW approval
Table 2: Area of each vegetation type and estimated number of credits generated at Offset Site A (Windemere)
Table 3: Area of each vegetation type and estimated number of credits generated at Offset Site B (Rockview South)       10
Table 4: Sapphire Wind Farm Offset requirements for vegetation types and how met by proposed Offset         Sites A and B
Table 5: Offset requirements for threatened species and how met by proposed Offset Sites A and B25
Table 6: Schedule of offset areas registration, annual management payments and retirement of credits in accordance with NSW and EPBC Act conditions of approval

## Abbreviations

Abbreviation	Description
BACAR	BioBank Agreement Credit Assessment Report
BBAM 2014	BioBanking Assessment Methodology 2014
BGW	Box Gum Woodland (i.e. White Box – Yellow Box – Blakely's Red Gum and derived native grassland endangered ecological community)
BOP	Biodiversity Offset Package
BTF	BioBanking Trust Fund
BVT	BioMetric Vegetation Type
CEEC	Critically Endangered Ecological Community
СМА	Catchment Management Area
СоА	Condition of Approval
CWPR	CWP Renewables Pty Ltd
DOEE	Commonwealth Department of the Environment and Energy (formerly DotE)
DotE	Commonwealth Department of the Environment (now DOEE)
DPE	NSW Department of Planning and Environment
EEC	Endangered Ecological Community
ELA	Eco Logical Australia Pty Ltd
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
FBA	Framework for Biodiversity Assessment
LGA	Local Government Area
NPWS	NSW National Parks and Wildlife Service
OEH	NSW Office of Environment and Heritage
PCT	Plant Community Types
SWF Pty Ltd	Sapphire Wind Farm, Pty Ltd
TFD	Total Fund Deposit
TSC Act	Threatened Species Conservation Act 1995
WTG	Wind Turbine Generator

# **Definitions and Key Dates**

Abbreviation	Description
Averted Loss	Refers to additional credits generated at BioBank sites that are located on land zoned RU1 (Rural Productivity) as the changed land use will lead to a significant improvement in biodiversity values
BBAM 2014	BioBanking Assessment Methodology
BioBanking Agreement	An agreement entered into between the Minister and land owner for the purposes of establishing a BioBank site under Division 2 of the TSC Act 1995
BioBank Site	Means the land that is designated by a BioBanking agreement to be a BioBank site
BioBank Site Management Plan	The plan that outlines how the BioBank site is to be managed to improve and maintain biodiversity values which forms part of a BioBanking agreement
BioBanking Trust Fund	Means the Fund established under the BioBanking scheme to receive payments following the sale of biodiversity credits to provide for the in perpetuity conservation management of the BioBank site
Commencement of Construction	Construction of Sapphire Wind Farm is expected to commence in December 2016 and take around 20 months to complete (i.e. July 2018)
Commencement of Operation	Sapphire Wind Farm is expected to commence operation (i.e. generate electricity) in July 2018
Ecosystem Credit	As described under the BBAM, the class of credit for biodiversity certification that are generated for conservation measures or required for the land proposed for certification. Ecosystem credits are also generated for some threatened species that are assumed to be present based on the location of the site and the vegetation types present.
Offset Management Plan	A plan prepared to direct the management of the offset area as required by the EPBC Act conditions of approval 3
Species Credit	As described in the BBAM, the class of credits for biodiversity certification that are generated for a conservation measure or are required for the land proposed for certification
Strategic Location	Refers to a BioBank site that includes land that is part of a state or regional significant biodiversity link or the riparian buffer of a 3 <sup>rd</sup> order stream or higher
Total Fund Deposit	The Total Fund Deposit (TFD) for a BioBank site is an amount determined by the Director- General as the present value of all scheduled management payments in respect of a BioBank site at the time the BioBanking agreement is entered into

### 1 Background

In 2007 Sapphire Wind Farm Pty Ltd (SWF, the wind farm) proposed a 159 turbine wind farm in the northern Tablelands of NSW. The NSW Department of Planning and Environment (DPE) and the then Commonwealth Department of the Environment (DotE) (now Department of the Environment and Energy (DOEE), approved the Wind Farm in June 2013 and December 2014 respectively.

In January 2016, SWF requested a modification to the approval to reduce the number of turbines from 159 to up to 109 turbines and increase the maximum tip height and rotor diameter. The DPE and the then DotE approved the modification request in June 2016 (**Appendix A and B**).

The approved wind farm layout of 109 wind turbine generators (WTGs) was estimated to impact (clear) up to 126.71 hectares (ha) of native vegetation including endangered ecological communities (EECs) and potential habitat for threatened species (in particular the critically endangered Regent Honeyeater). The operation of the wind farm may lead to further impacts on bats and birds which may forage within the vicinity of wind turbines, which will be managed in accordance with the Project's Bird and Bat Adaptive Management Program which was submitted to DPE and Office of Environment and Heritage (OEH) for review on October 19, 2016. Comments on the BBAMP are currently being addressed.

The final wind farm layout includes only 75 WTGs and the impacts to native vegetation and threatened species habitat following micro-siting of turbines is now calculated at 100.29 ha, which is significantly lower than the estimated 126.7 ha for the 109 WTG layout. However, the offsets required for the 109 WTG layout are proposed to be met. It is proposed to commence construction of the wind farm in December 2016.

#### 1.1 NSW Offset Requirements

To compensate or offset the predicted impacts, the NSW approval (Condition C7) requires the proponent, SWF, to retire, within 12 months of the commencement of construction (unless otherwise agreed by the Secretary), the number and class of biodiversity credits identified in **Table 1**, in accordance with the NSW Biodiversity Offset Policy for Major Projects.

In November 2016 the Proponent requested the Secretary vary condition C7 to permit the following:

- 1. Black Cypress Pine credits required under CoA C7 be considered interchangeable with the Black Cypress Pine Plant Community Type at Rockview South.
- Ecosystem and species credits which cannot be generated by the Windemere property (i.e. Black Cypress Pine ecosystem credits and a portion of the Regent Honeyeater species credits), be permitted to be retired up to five years after the commencement of Operations (i.e. consistent with the Commonwealth offset requirement).
- 3. A deferred TFD payment structure be accepted, backed by the 20-year ACT Government Power Purchase Agreement, to allow the Project to deliver the Package at both Windemere and Rockview South.

On 2 December 2016, DPE agreed to vary the timing for retirement of the biodiversity credits such that they may be retired up to 5 years after the commencement of operations subject to the preparation of a Biodiversity Offset Package that specifically addresses the matters identified in the Proponent's letter, and the items below.

The package must be prepared in consultation with OEH and submitted to the Secretary prior to the commencement of construction.

At a minimum, the package must:

- 1. Be prepared in accordance with Stage 3 of the Framework for Biodiversity Assessment (FBA) including the requirements set out in Table 22 of the FBA.
- 2. Include a commitment to fund and implement the active management of both the Windemere and Rockview South Offset Sites for the period between the commencement of construction and the retirement of credits.
- 3. Describe the mechanisms by which the credits would be retired, including a schedule for the proposed deferred payment structure to the BioBanking Trust Fund.
- 4. Details of the proposed management and monitoring of the Offset Sites, including provisions for the annual review and reporting of the monitoring outcomes to both the Department and OEH for the period between the commencement of construction and the retirement of credits.

The Department has also advised that:

- the Black Cypress Pine credits required under condition C7 are interchangeable with the Black Cypress Pine PCT credits proposed to be retired from the proposed Rockview South Offset Site; and
- OEH supports the provision of an expert report by Dr Stephen Debus for the Regent Honeyeater, as per the FBA requirements.

The letters from the Proponent and DPE are provided as Annexes to this Package (**Appendices C and D**).

Biometric Vegetation Type	Biometric Condition / Structure	Impact Area (ha)	Credits Required
Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Moderate to Good / Native Pasture	1.30	19
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Moderate to Good / Native Pasture	6.73	106
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Low / Paddock trees	0.29	2
White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Moderate to Good / Woodland	3.68	97
Manna Gum – Rough-barked Apple – Yellow Box grassy woodland/open forest	Moderate to Good / Native Pasture	47.34	642

Table 1: The number and types of biodiversity credits to be retired in accordance with the NSW approva							
Table 1: The number and types of biodiversity credits to be retired in accordance with the NSW approva	T.I.I. 4 TI						O14/
	1 2 DIA 1 · I D	a number and types	: AT DIADUVAREITV	crodite to bo	rotirod in accord	anco with tho N	SW annrovai
					reureu in accoru		

of the New England Tablelands and North Coast			
Manna Gum – Rough-barked Apple – Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Low / Paddock trees	22.40	261
Manna Gum – Rough-barked Apple – Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Moderate to Good / Woodland	44.48	1,274
Black Cypress Pine – Tumbledown Gum – Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion	Moderate to Good / Native Pasture	0.49	9
Total		126.71	2,410

Species	Potential Habitat Impacted (ha)	Credits Required
Regent Honeyeater	48	3,708

The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and the FBA, and can be achieved by:

- (a) acquiring or retiring credits under the BioBanking scheme in the TSC Act;
- (b) making payments into an offset fund that has been established by the NSW Government; or
- (c) providing suitable supplementary measures.

#### 1.2 Commonwealth Offset Requirements

Condition 2 of the Commonwealth approval requires SWF Pty Ltd to 'provide for the Ministers approval, prior to the commencement of construction, a Biodiversity Offset Package (BOP) to protect White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community (BGW) and habitat for the Regent Honeyeater, Swift Parrot and Border Thick-tailed Gecko'.

The package must:-

- a. Outline the purpose of the Package;
- b. Include map/s that clearly depict BGW, Border Thick-tailed Gecko, Regent Honeyeater and Swift Parrot habitat in the Offset Sites;
- c. Describe how the Offset Sites will be legally secured and managed to ensure the enduring value of the offset; and
- d. Provide for the protection of Offset Sites containing at least:
  - *i.* 260 hectares of BGW at Offset Site A (Annexure A) within one year of the commencement of construction;

- ii. 165 hectares of habitat for the Border Thick-tailed Gecko at Offset Site B (Annexure A), or alternate Offset Sites for the Border Thick-tailed Gecko agreed in writing by The Minister, within five years of the commencement of operation; and
- iii. 725 hectares of habitat for the Regent Honeyeater and Swift Parrot at Offset Sites A and B (Annexure A), or alternate Offset Sites for the Regent Honeyeater and Swift Parrot agreed in writing by The Minister, within five years of the commencement of operation.

Where an area of habitat is deemed suitable to meet the offset requirements of more than one species or community, the area of habitat may count towards the offset requirements for each species or community.

The current construction schedule identifies that the wind farm will commence operation 20 months after the commencement of construction (i.e. July 2018).

Further, Condition 2A states that 'the approval holder (i.e. SWF Pty Ltd) must legally secure Offset Sites A and B (or alternate Offset Sites agreed in writing by The Minister) in accordance with the approved Package. Evidence of the legal securing of the offset must be provided to The Department within one month of the Offset Sites being secured, including associated GPS coordinates and shapefiles'.

If, in accordance with the Package, an Offset Site is to be legally secured under the NSW Biodiversity Banking and Offsets Scheme, the management plan developed under the NSW Biodiversity Banking Agreement for that Offset Site is an Offset Management Plan for the purposes of Condition 3.

Condition 3 states that 'the approval holder must provide for The Minister's approval an Offset Management Plan for Offset Sites specified in the approved Package. The Offset Management Plans (the Plans) must be consistent with the Package, and can only be submitted to The Minister for approval after the Package has been approved by The Minister'. A Plan must include:

- a. a qualitative and quantitative analysis of the ecological values of the Offset Sites in relation to the matter/s being offset;
- b. measures to prevent and control pest animal, weed or pathogen incursions, including through edge effects, and feasible measures to eradicate invasive weed species;
- c. measures to prevent unauthorised public access;
- d. measures to maintain or enhance the values of the Offset Sites through ecologically sensitive fire regimes;
- e. measures to enhance the offset values of Offset Site A (Annexure A);
- f. measures to maintain or enhance the offset values of Offset Site B (Annexure A);
- g. a monitoring and reporting regime for tracking offset conditions and the effectiveness of management measures;
- h. an adaptive implementation programme for the Plan; and
- *i.* timeframes for Plan implementation.

A draft Biodiversity Offset Package was submitted to the Commonwealth Department of the Environment and Energy (DOEE) in September 2016 and feedback was received in November 2016. DOEE also confirmed that construction of the Project may commence as the Package has been submitted, however the Operation of the action may not commence until Offset Management Plans have been approved in writing by The Minister. The Plans, once approved, must be implemented. This document addresses comments received from DOEE on the draft Biodiversity Offset Package.

#### 1.3 Proposed Biodiversity Offset Package

On behalf of SWF, CWP Renewables Pty Ltd (CWPR) and Eco Logical Australia (ELA) have identified two potential offset properties which in combination are expected to meet all of the offset requirements for the Project (**Figure 1, Figure 2** and **Figure 5**):

- Offset Site A: Windemere a 316 ha property at Kings Plain, NSW; and
- Offset Site B: Rockview South a 484 ha property near Bundarra, NSW.

SWF has signed a Purchase Option with the owners of Offset Site A (Windemere) to purchase the property and then register a BioBank Agreement over the title; this agreement will be executed in December 2016. The Windemere BioBank site will 'generate' all ecosystem credits required by the NSW approval with the exception of the 9 credits of '*Black Cypress Pine – Tumbledown Gum – Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion*', and around 55% of the Regent Honeyeater species credits. Windemere also meets over 100% of the EPBC Act Box Gum Woodland (265.51 ha) and 40% of Regent Honeyeater/Swift Parrot habitat requirements (**Section 2.1** includes details of the area of each vegetation type and an estimate of the number of credits that would be generated).

SWF has signed a BioBanking Credit Acquisition Deed with the owner of Offset Site B (Rockview South) to assess and apply to have a BioBanking Agreement registered over the title to generate the additional credits required to fulfil the NSW offset requirements (Black Cypress Pine and Regent Honeyeater) and the additional Commonwealth offset requirements for Regent Honeyeater/ Swift Parrot (a further 436 ha) and Border Thick-tailed Gecko habitat (165 ha). The owner of Offset Site B has agreed to sell any required BioBanking credits to the Project to meet the offset requirements (**Section 2.2** includes details of the area of each vegetation type and an estimate of the number of credits that would be generated).

ELA have been engaged by CWPR, on behalf of SWF, to complete the detailed vegetation mapping and habitat assessments of these properties to satisfy the registration requirements of a BioBanking Agreement. ELA is confident that both properties are able to meet all of the NSW and EPBC Act offset requirements.

In accordance with the letter from the NSW Secretary on 2 December 2016, the Biodiversity Offset Package may be revised once final credit calculations are available for each Offset Site, during the BioBank registration process.

#### 1.4 Purpose of Document

The purpose of this Biodiversity Offset Package is to describe the proposed offsets which will be used to meet the offset requirements of both the NSW and EPBC Act conditions of approval, and provide a clear description of the sequence of activities, timing and responsibilities for delivering the offsets. This document will:-

- Demonstrate that the identified offsets areas are able to meet the offset requirements of the approval conditions;
- Identify the likely timeframes to formally assess and secure the offset areas (i.e. register BioBank Agreements on title and purchase credits) to meet the approval conditions;
- Define the anticipated management costs and a schedule of payments proposed under the deferred payment structure for both Offset Site A (Windemere) and Offset Site B (Rockview South);
- Detail the proposed means by which the sites will be managed and monitored following registration as BioBank sites.



Figure 1: Location of proposed offset properties in relation to the Sapphire Windfarm

## 2 Offset Areas and Biodiversity Values

#### 2.1 Offset Site A - Windemere

#### 2.1.1 Description and current management

Windemere, Lot 286 DP 750076, is a 316 ha rural property, located approximately 3km north of the proposed wind farm, on the southern side of Kings Plain Road in the Inverell Shire Local Government Area (LGA) (**Figure 2**). The property is zoned RU1 'Rural Productivity' in the Inverell LEP (2012) and is currently used for cattle grazing. The property includes a homestead near its northern boundary and a powerline easement running north-south in the western part of the property (**Figure 3**).

#### 2.1.2 Biodiversity Values

ELA have undertaken a vegetation assessment of the property and have mapped three plant community types (PCTs) in seven condition classes (vegetation zones) (**Figure 4**). After exclusion of the homestead paddock and powerline easements, there is 288.59 ha of BioBank area available that will generate an estimated 2,597 ecosystem credits (based on vegetation condition and the 'averted loss' score for the zoning of the property) (**Table 2**). There is also an additional 6.9 ha that is legally part of the property but due to the 'give and take' nature of the existing boundary fence, will not form part of the registered BioBank area.

Veg Zone	Plant Community Type	Ancillary	Area (ha)***	Est Credits/ha#	Credits
1	Blakely's Red Gum - Yellow Box grassy woodland of the New England Tableland	Good	117.82	9	1,060
2	Blakely's Red Gum - Yellow Box grassy woodland of the New England Tableland	DNG	129.11	9	1,182
3	Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast	Good	20.03	9	180
4	Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast	DNG	2.57	9	23
5	Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast	Exotic Understory	0.48	9	4
6	White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion	Good	9.41	9	85
7	White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion	DNG	9.17	9	83
	Dams		1.56	0	
			290.16		2,597

#### Table 2: Area of each vegetation type and estimated number of credits generated at Offset Site A (Windemere)

\*\*\* the areas shown only include those areas that form part of the offset area. Easements, management trails and dams have been excluded from this area

# based on a conservative estimate of 9 credits/ha. The 'averted loss' score for the site may increase this to 10 credits/ha and will be confirmed as part of the formal credit calculations to be undertaken in December 2016.

Windemere is within the distributional range for both the Regent Honeyeater and Swift Parrot and supports suitable foraging habitat for both species although they have not been recorded in the locality since 1994. The species were also not recorded as part of the impact assessment of the wind farm, however both the NSW Office of Environment and Heritage (OEH) and Commonwealth DotE required that these species be considered to be present, and therefore impacted by the wind farm, and an

appropriate offset (habitat) provided. In the absence of confirmed records of these species within the BioBank site, the BioBank site assessment will include an 'expert report' that will state in the opinion of the expert that the species is 'likely' to be present or use habitat within the BioBank site from time to time. The area of potential Regent Honeyeater foraging habitat is shown in **Figure 5**.

The proposed expert, Dr Stephen Debus, has been confirmed as a suitably qualified expert by the OEH and by the DPE in their letter dated 2 December 2016.

There are likely to be around 200 Blakely's Red Gum – Yellow- Box ecosystem credits generated which are surplus to the NSW offset requirements. To date, three additional threatened species have been recorded on the property, the Koala (*Phascolarctos cinereus*), *Eucalyptus rubida subsp. barbigerorum* and Austral Toadflax (*Thesium australe*). These ecosystem and species credits, which are not required to meet the NSW offset requirements for the project, will be retired in accordance with the Project's commitment in relation to the deferred payments to the BioBanking Trust Fund, as defined in the Proponents letter to DPE dated November 25, 2016.

#### 2.1.3 Assessment and Registration

A formal BioBank assessment of Offset Site A (Windemere) has commenced and field survey was completed in October 2016. Credit calculations and management plans are currently being finalised with a view to submitting the application for registration of a BioBanking Agreement in February 2017. Subject to the audit process undertaken by the OEH, it is expected that the property will be registered as a BioBank Site by September 2017, i.e. within 12 months of the commencement of proposed construction of the wind farm. Annual management will commence once the Biobank site is registered.

#### 2.1.4 Management Actions and Costs

Conservation management costings of the proposed BioBank have been undertaken which estimates that \$1.3M will be required for the in perpetuity conservation management of the proposed BioBank site (Refer to BioBanking in perpetuity management cost spreadsheet in **Appendix E**).

The Secretary of DPE has agreed to delay the retirement of credits until five years after the commencement of operations on the basis that SWF commits to fund and implement the management actions required under the BioBank Agreement from year 1. As part of this agreement, SWF commits to:

- 'commit' all biodiversity credits generated by the Windemere BioBank site, including surplus ecosystem credits and the Koala and *Swainsona sericea* species credits, when the BioBank site is registered, and retire those credits within 5 years of the commencement of construction;
- commence active conservation management of the BioBank site in accordance with the BioBank site management plan within 12 months of the planned commencement of the Project (i.e. December 2017) until the retirement of credits;
- pay the annual cost of management of the offset area from Project revenues for the first six years until the TFD payment is made and all credits are 'retired'. These payments (Refer to Appendix C) are estimated at:
  - o December 2017 -\$95,534
  - o December 2018 -\$92,071
  - o December 2019 -\$45,571
  - o December 2020-\$51,471
  - December 2021 -\$69,821
  - o December 2022 -\$51,321
- provide the Windemere property as security for the TFD payments.

Five years after the commencement of operations (expected to be year 6 of the BioBank Agreement), the Total Fund Deposit amount (TFD) will be recalculated to determine the sum of funds required to provide for the ongoing management of the BioBank site. The recalculation of funds will take into account the management actions undertaken at the property, and the costs incurred for those actions. It is expected that the remaining TFD will be approximately \$1.0M after the payment of management cost in years one to six. Based on the current schedule this sum will be payable by the Project by July 2023.

The sums provided above are estimates only and are likely to vary by up to 10% once formal credit calculations are undertaken (which may result in a different number of credits generated) and discussions with OEH regarding the recalculation of the TFD requirement at the end of year 6. The final credit costs will be identified upon registration of the Windemere BioBank site.

#### 2.2 Offset Site B - Rockview South

#### 2.2.1 Description and current management

Rockview South, Lot 53 DP 752195, is a 484 ha rural property, located approximately 100km south-west of the proposed wind farm in the Tamworth Regional Council Local Government Area (LGA) (**Figure 6**). The property is zoned RU1 'Rural Productivity' in the Tamworth Regional LEP (2010) and has been used for cattle grazing. The property is adjacent to a Nature Conservation Trust registered property (Rockview) and forms part of a continuous vegetated area linking to Ironbark Nature Reserve and another private conservation area (Bornhardtia Voluntary Conservation Area) registered under the *National Parks and Wildlife Act* 1979 (**Figure 7**).

#### 2.2.2 Biodiversity Values

ELA have undertaken a vegetation assessment of the property and have mapped six plant community types (PCTs) in 12 condition classes (vegetation zones) (**Figure 8**). After exclusion of the homestead paddock and a formed road and access easements to neighbouring properties, there is 478.71 ha of BioBank area available that will generate an estimated 4,787 ecosystem credits (based on vegetation condition, a BioBank site in a 'strategic location' (a third order creek line) and the 'averted loss' score for the zoning of the property) (**Table 2**).

Veg Zone	Plant Community Type	Ancillary	Area (ha)***	Est. Credits/ha#	No. credits
1	Black Cypress Pine - Orange Gum - Tumbledown Red Gum shrubby woodland on granites of the Nandewar Bioregion and New England Tableland Bioregion	Good	304.83	10	3048
2	Black Cypress Pine - Orange Gum - Tumbledown Red Gum shrubby woodland on granites of the Nandewar Bioregion and New England Tableland Bioregion	Scattered trees	2.53	10	25
3	Black Cypress Pine - Orange Gum - Tumbledown Red Gum shrubby woodland on granites of the Nandewar Bioregion and New England Tableland Bioregion	DNG	1.71	10	17
4	Black Cypress Pine - White Box - Tumbledown Gum shrubby open forest / woodland mainly in the Mt Kaputar region, Nandewar Bioregion	Good	7.80	10	78
5	Orange Gum – Caley's Ironbark - Red Stringybark open forest of the southern Nandewar Bioregion and New England Tableland Bioregion	Good	85.59	10	856
6	Sedgeland fens wetland of impeded drainage of the Nandewar Bioregion and New England Tableland Bioregion	Good	4.51	10	45
7	White Box shrubby open forest on hills mainly in the Nandewar Bioregion	Good	11.03	10	110
8	White Box shrubby open forest on hills mainly in the Nandewar Bioregion	DNG	0.77	10	8
9	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	Good	40.51	10	405
10	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	Poor	11.25	10	113
11	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	DNG	6.85	10	68
12	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	Cleared	1.32	10	13
999	House Paddock	Cleared	2.06		
999	Road and tracks	Track	2.66		
999	Dam	Dam	0.17		
			483.59		4.787

Table 3	3: Area of	each vege	tation type a	nd estimate	d number (	of credits	generated a	at Offset S	ite B (F	lockview
South)	1	-					-		-	

\*\*\* the areas shown only include those areas that form part of the offset area. Easements, management trails and dams have been excluded from this area.

#based on a conservative estimate of 10 credits/ha. The 'strategic location' and 'averted loss' score for the site may increase this to 11 or 12 credits/ha and will be confirmed when formal credit calculations are completed in December 2016.

The local area is known to be important for Regent Honeyeaters with regular breeding events within five kilometres of the site and documented records from within and adjacent to Ironbark Nature Reserve (Ironbark Nature Reserve and Bornhardtia Voluntary Conservation Area Plan of Management, NSW National Parks and Wildlife Service, 2004) (**Figure 9**).

The former OEH Regent Honeyeater Recovery Program Coordinator, David Geering, has also advised that

Sightings of Regent Honeyeaters during winter in areas dominated by Caley's Ironbark northwest of Bundarra suggest that, at times, part of the population may disperse into the foothills of the Nandewar Range, stretching from west of Inverell and Bundarra, through the Ironbark Nature Reserve and south to Linton Nature Reserve and Warrabah National Park.

During the vegetation mapping in July 2016, a small flock of Swift Parrots were observed in the offset area. Border Thick-tailed Gecko was also recorded on site in 2016 and has been recorded in numerous locations within the Voluntary Conservation Area property. There are extensive areas of similar habitat (exfoliating granite outcrops (cover photo)) on Rockview South which are considered highly likely to support this species. The owner of the property, Dr John T Hunter, who is an experienced ecologist, has advised that the species has been observed on the property (**Figure 10**). Planned surveys in summer 2016 will confirm the extent of these records and other threatened species.

The surrounding lands (Rockview Conservation Area, Ironbark Nature Reserve and Bornhardtia Conservation Area) are also known to provide habitat for as variety of other threatened species, including Koala, Squirrel Glider and Spot-tailed Quoll. These species are also likely to be present on Rockview South and will be confirmed as part of the detailed site assessment. Whilst not required to meet the offset requirements of the project, these species will also benefit from the conservation management of the Rockview South property (i.e. the proposed Rockview South BioBank site will generate a number of additional credits for both vegetation types and threatened species that are not required by the project). SWF will only purchase and retire those credits required under the Project approval, any surplus credits will be retained by the BioBank site owner.

#### 2.2.3 Assessment and Registration

A formal BioBank assessment of Rockview South has commenced and vegetation and habitat mapping was completed in October 2016. Additional surveys for Border Thick-tailed Gecko are expected to be completed in December 2016. Credit calculations and management plans are currently being finalised with a view to submitting an application for registration of a BioBanking Agreement in February 2017. Subject to the audit process undertaken by the OEH, it is expected that the property will be registered as a BioBank Site by September 2017, i.e. well in advance of the EPBC Act requirement to secure and commence active management of the offset area '*within 5 years of the commencement of operation*' (expected July 2023). The reason that Rockview South will be registered in advance of EPBC Act approval requirements is to avoid any uncertainty regarding recent changes to the NSW BioBank site assessment methodology (likely to take effect in early 2017) and to allow the landowner to commence management actions immediately upon registration, providing certainty for regulators regarding the security of the offset areas. Annual management will commence once the Biobank site is registered.

#### 2.2.4 Management Actions and Costs

The EPBC Act approval, and the revised condition C7 under the NSW approval, require the Rockview South offset to be secured and managed five years after commencement of operation of the wind farm (expected July 2023). However, SWF has reached agreement with the owner of Rockview South that management actions for the property will commence one year after the commencement of construction (i.e. in December 2017). SWF has signed a BioBanking Credit Acquisition Deed with the owner which ensures the Project can register the BioBank site, as well as purchase, commit and retire any credits generated at the site which are required for the Project.

To facilitate this, the Project will implement and fund the management actions for those credits being retired for the Project, from one year after the commencement of construction until the credits are retired, using the trust fund deposit calculations for the BioBank site. These payments (**Refer to Appendix F**) are estimated at:-

- o December 2017 \$47,809
- o December 2018 \$41,859
- o December 2019 \$23,859
- o December 2020 \$24,009
- o December 2021 \$18,859
- o December 2022 \$19,414

The remaining TFD sum for the entire Rockview BioBank site, following the six years of management, has been estimated at \$1.5M resulting in an estimated ecosystem credit price of approximately \$330 each (Refer to BioBanking in perpetuity management cost spreadsheet in **Appendix F**). However, to meet the EPBC Act approval offset requirement, only 4,365 ecosystem credits will be required (costing approximately \$1.440M). In addition, 3,099 Regent Honeyeater and 1,172 Border Thick-tailed Gecko species credits will also need to be purchased and retired. As the EPBC Act 'habitat' credits for these species will already met by the retirement of ecosystem credits, a nominal cost of \$1 each has been applied (i.e. \$1,172 for Thick-tailed Gecko and \$3,099 for Regent Honeyeater).

The total cost to secure the offset requirements from the Rockview South BioBank site (Offset Site B) is therefore estimated at \$1.621M (which includes the six active management payments totalling \$176,000, the \$1.440M to purchase the required number of ecosystem credits and \$4,271 for the species credits) which will be payable by July 2023. Any remaining credits will be retained by the owner of Rockview South.

The sums provided above are estimates only and are likely to vary by up to 10% once formal credit calculations are undertaken (which may result in a different number of credits generated) and discussions with OEH regarding the recalculation of the TFD requirement at the end of year 6. The final number of credits generated will be confirmed upon registration of the BioBank site in 2017.



Figure 2: Offset Site A Property Boundary - Windemere



Figure 3: Potential BioBank Area available at Windemere



#### Figure 4: Vegetation mapping of Windemere



Figure 5: Regent Honeyeater and Swift Parrot foraging habitat at Windemere



Figure 6: Offset Site B Property Boundary – Rockview South



#### Figure 7: Rockview South property context



Figure 8: Vegetation mapping of Rockview South



Figure 9: Regent Honeyeater and Swift Parrot breeding and foraging habitat at Rockview South



Figure 10: Border thick tailed Gecko habitat and records on and adjacent to Rock view South

## 3 Meeting Offset Requirements and Costs

#### 3.1 Offset Requirements

**Table 4** and **Table 5** show the NSW and Commonwealth offset requirements for the Sapphire Wind Farm and how proposed Offset Properties, Offset Site A (Windemere) and Offset Site B (Rockview South) meet these requirements.

#### 3.1.1 Ecosystem Requirements

All NSW ecosystem credits will be met at Offset Site A (Windemere), except for 9 credits of 'Black Cypress Pine – Tumbledown Gum – Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion', which will be met at Offset Site B (Rockview South). Surplus to the NSW requirement, approximately 200 credits of Blakely's Red Gum – Yellow Box grassy woodland will also be retired at Windemere under the deferred credit retirement approach. All of the Commonwealth vegetation requirement of Box Gum Woodland will be met at Windemere (265 ha of the 260 ha requirement). Rockview South provides an additional 58.6 ha of Box Gum Woodland, which provides part of the Regent Honeyeater habitat requirements, which will also be retired.

#### 3.1.2 Species Requirements

Windemere provides around 55% of the NSW Regent Honeyeater species credits (2,049 of the 3,708 required species credits) and 40% (288.6 of 725 ha) of the Commonwealth Regent Honeyeater and Swift Parrot habitat requirements. The remaining 45% of Regent Honeyeater credits will be met at Rockview South, as well as all of the remaining Commonwealth requirements for Regent Honeyeater and Swift Parrot habitat (an additional 473 ha of which only 436.4 ha is required). Rockview South will provide all habitat required for the Border Thick-tailed Gecko (309 ha of which only 165 ha is required) under the Commonwealth approval.

SWF has committed to retire any additional credits generated at Windemere which are not required under the approval, under the agreed proposal for deferred credit retirement and implementation of the management requirements in advance. Species credits to be retired include Koala and *Swainsona sericea*. Any surplus credits generated at Rockview South will be retained by the owner.

#### 3.2 Cost to secure offsets and staging of payments

#### 3.2.1 Offset Site A - Windemere

As outlined in Section 2.1, it is expected that Windemere will be registered with a BioBank Agreement by September 2017 with all ecosystem and species credits being committed by the Project upon registration. Active management of the offset area will commence by December 2017 (i.e. within 12 months of commencement of construction). The Project will fund annual management for the first 6 years in accordance with the schedule provided in **Table 6**. The Project will then fund the purchase and retirement of all biodiversity credits, including any surplus credits, by the end of year 6 (December 2023) which is estimated at around \$1.0M (**Table 6**). The TFD will be recalculated upon credit retirement to evaluate the management actions undertaken to date and the remaining activities required to achieve the objectives of the BioBanking Site Management Plan.

#### 3.2.2 Offset Site B - Rockview South

As outlined in Section 2.2, it is expected that Rockview South will also be registered with a BioBank Agreement by September 2017 with all credits required for the Project being committed upon registration.

Active management of the offset area will commence in December 2017 (i.e. within 12 months of commencement of construction).

The Project will provide funds to the owner of Rockview South to commence active management from December 2017 in accordance with the schedule provided in **Table 6**.

The Project will fund the purchase and retirement of the ecosystem credits and species credits required to meet the remaining NSW and Commonwealth offset requirements within 5 years of the commencement of operations (i.e. July 2023). The TFD is estimated at \$1.445M (**Table 6**) but will be recalculated upon credit retirement to evaluate the management actions undertaken to date and the remaining activities required to achieve the objectives of the BioBanking Site Management Plan.

The total cost to manage the biodiversity offset areas in accordance with the NSW and EPBC Act CoA is estimated at \$3.141M with payments spread from December 2017 to July 2023 as shown in **Table 6**.

#### Table 4: Sapphire Wind Farm Offset requirements for vegetation types and how met by proposed Offset Sites A and B

			109 Turbines		Offset Site A (Windemere)		Offset Site B (Rockview South))											
Formation	BioMetric Vegetation Type	Vegetation Condition	Impacts (ha)	NSW Credit Requirements	EPBC Act Habitat Requirements (ha)	Offset Area (ha)	Credits/ha	Estimate of ecosystem credits	Offset Area (ha)	Credits/ha	Estimate of ecosystem credits	Credit Surplus / Deficit	Matching Credits BBAM / FBA					
	White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Woodland	3.68	205		9.41	9		0	10								
	White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Scattered Paddock Trees	0.29			0	9	167	0	10	0	-38						
	White Box grassy woodland of the Nandewar and Brigalow Belt South Bioregions	Derived Grassland	6.73			9.17	9		0	10								
	Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Woodland	1.30		260.00	117.82	9		40.51	10			796					
ands	Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Scattered Paddock Trees		19				- 2,222	11.25	10	- 599 2,803	2,803						
Voodla	Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Derived Grassland	0.00			129.11	9		6.85	10								
assy V	Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tablelands	Cleared/Regen							1.32	10								
Gra	Manna Gum - Rough-barked Apple - Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Woodland	44.48			20.03	9	0	0	10								
	Manna Gum - Rough-barked Apple - Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	Derived Grassland	22.40	2,177	2,177	2,177	2,177	2,177	2,177	0.00	2.57	9	208	0	10	0	-1,969	
	Manna Gum - Rough-barked Apple - Yellow Box grassy woodland/open forest of the New England Tablelands and North Coast	cleared to be regenerated	47.34			0.48	9		0	10								
	Black Cypress Pine - Tumbledown Gum - Narrow-leaved Ironbark open forest of northern parts of the Nandewar Bioregion	Woodland	0.49	9	0.00							-9	847					
	Orange Gum Caley's Ironbark - Red Stringybark open forest (PCT 537, BR323, NA321)	Open Forest							85.59	10	856	856						
	Black Cypress Pine - Orange Gum - Tumbledown Gum shrubby woodland (PCT 502, BR263, NA247)	Woodland							304.83	10	3,048	3,048	3,048					
l Forest	Black Cypress Pine - Orange Gum - Tumbledown Gum shrubby woodland (PCT 502, BR263, NA247)	Scattered Trees							2.53	10	25	25	25					
lerophyl	Black Cypress Pine - Orange Gum - Tumbledown Gum shrubby woodland (PCT 502, BR263, NA247)	DNG							1.71	10	17	17	17					
Dry Sci	Black Cypress Pine - White Box - Tumbledown Gum - shrubby woodland (PCT506, BR268, NA250)	Woodland							7.8	10	78	78	78					
	White Box shrubby open forest (PCT 591, BR392, NA401)	Open Forest							11.03	10	110	110	110					
	White Box shrubby open forest (PCT 591, BR392, NA401)	DNG							0.77	10	8	8	8					
Freshwater Wetlands	Sedgeland fens wetland (PCT 582, BR340, NA346))	Good							4.51	10	45	45	45					
	Total Property Area		126.71	2,410	260.00	288.59		2,597	478.7		4,787	4,974	4,974					

Table 5: Offset requirements for threatened species and how met by proposed Offset Sites A and B

			Offset Site A (Windemere)		Offset					
	Credits Required NSW)	Area Required (ha) EPBC Act	Area (ha)	Credits/ha	Estimate of ecosystem credits	Area (ha)	Credits/ha	Estimate of ecosystem credits	Credit Surplus / Deficit	Area Surplu Defic
Regent Honeyeater Credits	3,708	725	288.59	7.1	2,049	473	7.1	3,357	398	36 h
Border Thick-tailed Gecko habitat	0	165	0	7.1	0	309.07	7.1	2,194	1,023	144 ł

#### Sapphire Wind Farm Biodiversity Offset Package Scoping Document



Phase	Year / Month	Construction Timeframe	Offset Site A (Windemere) Mgt Costs	Offset Site B (Rockview) Mgt Costs	Total Cost to SWF
Commencement Construction	Dec-16				
	Dec-16	1			
	Jan-17	2			
Submit BB Applications for registration	Feb-17	3			
	Mar-17	4			
	Apr-17	5			
Expected OEH Audit of BB Sites	May-17	6			
	Jun-17	7			
	Jul-17	8			
	Aug-17	9			
Expected OEH Registration of BB Sites	Sep-17	10			
	Oct-17	11			
	Nov-17	12			
Commencement Mgt Windemere & Rockview	Dec-17	13 Yr 1	\$95,534	\$47,809	\$143,343
Commencement Operation of Wind Farm	Jul-18				\$0
	Dec-18	Yr 2	\$92,071	\$41,859	\$133,930
	Dec-19	Yr 3	\$45,571	\$23,859	\$69,430
	Dec-20	Yr 4	\$51,471	\$24,009	\$75,480
	Dec-21	Yr 5	\$69,821	\$18,859	\$88,680
	Dec-22	Yr 6	\$51,321	\$19,414	\$70,735
Purchase and retire all required credits	Jul-23		\$1,000,000	\$1,445,000	\$2,445,0 00
Totals			\$1,405,789	\$1,620,809	\$3,141,4 38

Table 6: Schedule of offset areas registration, annual management payments and retirement of credits in accordance with NSW and EPBC Act conditions of approval

### 4 Summary

#### 4.1 Purpose of Offset Package

The purpose of this Biodiversity Offset Package is to describe the proposed offsets which will be used to meet the offset requirements of both the NSW and EPBC Act conditions of approval, and provide a clear description of the sequence of activities, timing and responsibilities for delivering the offsets.

#### 4.2 Offset Properties and Biodiversity Values

Two offset properties are proposed in this package:

- Offset Site A: Windemere a 316 ha property at Kings Plain, NSW of which 288.59 ha will be registered as an offset area; and
- Offset Site B: Rockview South a 484 ha property near Bundarra, NSW of which 478.71 ha will be registered as an offset area.

The proposed offset properties are identified and discussed in Sections 2.1 and 2.2 and shown in **Figure 2** and **Figure 6** of this report.

A BioBanking field assessment has been undertaken by an Accredited BioBank Assessor, Greg Steenbeeke, which confirms that the properties contain the appropriate biodiversity values to meet the number and type of credits to meet the NSW and Commonwealth offset requirements (as shown in **Tables 2, 3, 4 and 5** and **Figures 4, 5, 8, 9** and **10**). An assessment of how these properties collectively meet the offset requirements of the approvals is provided in **Tables 4** and **5**.

Credit calculations are currently underway, with the applications for registration of BioBanking Agreements expected to be submitted in February 2017. Subject to the timeframe of the registration process it is expected that the proposed offset areas will be registered by September 2017 and all required credits will be 'committed' to the project.

#### 4.3 How Offset Package meets the NSW offset requirements

The revised NSW approval condition C7 requires the Proponent to retire, within 5 years of the commencement of operations, the number and class of biodiversity credits, as shown in **Tables 1**, in accordance with the NSW Biodiversity Offset Policy for Major Projects and the Framework for Biodiversity Assessment (FBA).

The proposed Biodiversity Offset Package has been prepared in accordance with the Framework for Biodiversity Assessment (FBA) and the requirements set out in Table 22 of the FBA by an accredited BioBanking Assessor.

**Tables 2**, **3**, **4 and 5** show how the proposed offset properties are able to meet these credit requirements of the FBA based on the preliminary biodiversity assessments of the properties undertaken to date.

**Sections 2.1** and **2.2** provide the commitments to formally assess, register and retire the credits generated to meet these requirements in accordance with the required timeframes.

The costed management actions for years 1-6 are provided in Appendices E and F.

**Table 6** provides a schedule of these annual management payments and the deferred payment structure to the BioBanking Trust Fund.

The offset sites will be managed in accordance with the management, monitoring and annual reporting requirements of the registered BioBanking Agreements by an integrated program of access control (stock/grazing exclusion), weed and pest animal control, revegetation and supplementary planting in degraded areas, implementation of an ecological burning regime.

OEH will undertake an annual audit, compliance and enforcement program if the Offset Sites are not managed in accordance with the BioBanking Agreement.

Funding for in perpetuity conservation management is held in a Trust Account (the BioBanking Trust Fund (BTF)) held by the Minister for the Environment and is paid to landholders annual on satisfactory review of each annual report. The management costs for Years 1-6 will be met directly by the Project, with the recalculated TFD being made upon the retirement of credits.

#### 4.4 How Offset Package meets Commonwealth offset requirements

The EPBC Act approval requires the Biodiversity Offset Package to:-

a. Outline the purpose of the Package;

The purpose of the package is outlined in Section 1.2 and 4.1

b. Include maps that clearly depict BGW, Border Thick-tailed Gecko, Regent Honeyeater and Swift Parrot habitat in the Offset Sites;

Maps that clearly depict BGW and habitat for Regent Honeyeater, Swift Parrot and Border Thick-tailed Gecko in the offset sites are provided by **Figures 4, 5, 8, 9 and 10** in Section 2.1 and 2.2 of this report. These maps show the vegetation types that provide the best habitat for these specie.

c. Describe how the Offset Sites will be legally secured and managed to ensure the enduring value of the offset;

Offset Sites A and B will be secured by registration of a NSW BioBanking Agreement on the title of the land in accordance with Part 7A of the NSW Threatened Species Conservation Act.

BioBank sites are managed to 'improve and maintain' biodiversity values by an integrated program of access control (stock/grazing exclusion), weed and pest animal control, revegetation and supplementary planting in degraded areas, implementation of an ecological burning regime and a program of annual reporting, audit by the OEH and a compliance/enforcement program if sites are not managed in accordance with the agreement.

Funding for in perpetuity conservation management is held in a Trust Account (the BioBanking Trust Fund (BTF)) held by the Minister for the Environment and is paid to landholders annual on satisfactory review of each annual report. The management costs for Years 1-6 will be met directly by the Project, with the recalculated TFD being made upon the retirement of credits in July 2023 as summarised in **Table 6**.

A BioBanking Agreement cannot be terminated by the land owner and is thus enduring.

- d. Provide for the protection of Offset Sites containing at least:
  - *i.* 260 hectares of BGW at Offset Site A within one year of the commencement of construction;
Offset Site A (Windemere) provides 265 ha of EPBC Act condition BGW (**Table 2**). A further 59 ha of EPBC Act condition BGW is provided by Offset Site B (**Table 3**). The areas are shown in **Figures 4** and **8**.

Offset Site A (Windemere) will be secured by the registration of a BioBank Agreement by September 2017 (construction expected to commence in December 2017). Active management will be implemented and funded by the Proponent from one year after the commencement of construction until the retirement of credits, whereby ongoing active management will be funded by the BTF. All management actions will be delivered in accordance with the registered BioBanking Site Management Plan by the landowner (i.e. the Proponent).

Offset Site B (Rockview South) will be secured by the registration of a BioBank Agreement by September 2017 with active management being funded by the Proponent from one year after the commencement of construction until the retirement of credits, whereby ongoing active management will be funded by the BTF. All management actions will be delivered in accordance with the registered BioBanking Site Management Plan by the landowner.

*ii.* 165 hectares of habitat for the Border Thick-tailed Gecko at Offset Site B, or alternate Offset Sites for the Border Thick-tailed Gecko agreed in writing by The Minister, within five years of the commencement of operation; and

Offset Site B (Rockview South) provides in excess of 165 ha of Border Thick-tailed Gecko habitat (**Figure 10**). The species has been confirmed to be present in the offset area in 2016 and adjacent properties (**Figure 7**).

iii. 725 hectares of habitat for the Regent Honeyeater and Swift Parrot at Offset Sites A and B (Annexure A), or alternate Offset Sites for the Regent Honeyeater and Swift Parrot agreed in writing by The Minister, within five years of the commencement of operation.

Offset Sites A and B provide in excess of 725 ha of Regent Honeyeater and Swift Parrot habitat (**Figures 5 and 9**). Swift Parrots were recorded foraging within Offset Area B in July 2016 and Regent Honeyeaters have regularly been recorded breeding and foraging within the vicinity of the Offset Site (**Figure 7**).

Offset Site A provides ha of high quality Regent Honeyeater foraging habitat including Blakely's Red Gum – Yellow Box woodland (**Figure 5**).

Offset Site B provides 473 ha of high quality Regent Honeyeater breeding and foraging habitat including Blakely's Red Gum – Yellow Box forest and Caley's Ironbark and is in close proximity to regular Regent Honeyeater breeding sites (Figures 7 and 9).

Offset Properties A and B will be secured by the registration of BioBank Agreements by September 2017, with all credits required for the Project being committed upon registration. Credits will be purchased and retired within five years of the commencement of operations.

### 4.5 Offset Management Plan

EPBC Act CoA 3 requires an Offset Management Plan to be prepared and approved by the Minister that includes:-

a. a qualitative and quantitative analysis of the ecological values of the Offset Sites in relation to the matter/s being offset;

- b. measures to prevent and control pest animal, weed or pathogen incursions, including through edge effects, and feasible measures to eradicate invasive weed species;
- c. measures to prevent unauthorised public access;
- d. measures to maintain or enhance the values of the Offset Sites through ecologically sensitive fire regimes;
- e. measures to enhance the offset values of Offset Site A (Annexure A);
- f. measures to maintain or enhance the offset values of Offset Site B (Annexure A);
- g. a monitoring and reporting regime for tracking offset conditions and the effectiveness of management measures;
- h. an adaptive implementation programme for the Plan; and
- *i.* timeframes for Plan implementation.

As Offset Properties A and B will both be secured by a BioBanking Agreement under the NSW BioBanking and Offset Scheme by September 2017, that includes a BioBank Site Management Plan, the BioBank Site Management Plan is deemed to meet the requirements of CoA 3.

### 4.6 Offset Package Commitments

The Proponent has developed this package in consultation with OEH, DPE and DOEE in order to meet the offset requirements under the NSW and Commonwealth Project approvals. Additionally the Proponent requested a variation to the NSW condition C7, primarily to allow for a deferred retirement of credits and deferred payment structure. This approach was pursued to deliver a cost-effective package which exceeds NSW offset requirements, despite the reduced size of the Project involving only 75 turbines and an estimated 100 ha of native vegetation impacts.

In developing this package, the Proponent has committed to the following:

- Offset Site A (Windemere) and Offset Site B (Rockview South) will both be secured by BioBanking Agreements under the NSW BioBanking and Offset Scheme in 2017. The applications to register the sites will be submitted to OEH in February 2017 following the detailed assessment of the properties which have been completed in 2016.
- All ecosystem and species credits generated at Windemere, including those surplus to the NSW
  offset requirements, will be committed upon registration. All credits required at Rockview South
  to meet the remaining offset requirements will be committed upon registration. All of these credits
  will be purchased and retired by the Project within five years after the commencement of
  operations (anticipated to be July 2023).
- Active management of both offset properties, in accordance with the registered BioBanking Site Management Plans, will commence within 12 months of the commencement of construction (anticipated to be December 2017) and continue until the retirement of credits. The project will fund annual management actions at both properties in accordance with the TFD calculations, in years 1-6 (Appendices E and F). The TFD payments for each property will be recalculated upon the retirement of credits, with the sum being paid to the BioBanking Trust Fund. The Project, as the owner of Windemere, will continue to implement the management actions in accordance with the BioBanking Site Management Plan, from year 7 onwards. The owner of Rockview South will be legally responsible for implementation of the BioBanking Site Management Plan at Rockview South, following the retirement of credits.
- The owner of each Offset Site will undertake annual monitoring in accordance with the property's BioBanking Site Management Plan, and annual reporting requirements and regular compliance and audit checks by OEH.

• Spatial data of each Offset Site and the relevant vegetation mapping and species credit mapping will be provided to DPE, OEH and DOEE upon registration of the BioBank sites.

Delivery of this offset package will meet the requirements of both the NSW and Commonwealth conditions of approval for the Project.

## References

NSW National Parks and Wildlife 2004. Ironbark Nature Reserve and Bornhardtia Voluntary Conservation Area Plan of Management. July 2004.

Office of Environment and Heritage (OEH) 2014. *BioBanking Assessment Methodology 2014*. Office of Environment and Heritage for the NSW Government, September 2014, Sydney. Available online: <u>http://www.environment.nsw.gov.au/resources/BioBanking/140661BBAM.pdf</u>

Office of Environment and Heritage (OEH) 2015. *NSW Vegetation Information System Classification Database*. Available online: http://www.environment.nsw.gov.au/NSWVCA20PRapp/default.aspx

# Appendix A NSW Approval

Provided as a separate document.

# Appendix B Commonwealth Approval

Provided as a separate document

# Appendix C Proponent request for variation to credit retirement timing

Provided as a separate document

Appendix D NSW approval of variation to Condition C7

Provided as a separate document

# Appendix E In Perpetuity Management Cost Estimates - Windemere

Provided as a separate document

# Appendix F In Perpetuity Management Cost Estimates - Rockview South

Provided as a separate document









#### **HEAD OFFICE**

Suite 2, Level 3 668-672 Old Princes Highway Sutherland NSW 2232 T 02 8536 8600 F 02 9542 5622

#### CANBERRA

Level 2 11 London Circuit Canberra ACT 2601 T 02 6103 0145 F 02 9542 5622

#### **COFFS HARBOUR**

35 Orlando Street Coffs Harbour Jetty NSW 2450 T 02 6651 5484 F 02 6651 6890

#### PERTH

Suite 1 & 2 49 Ord Street West Perth WA 6005 T 08 9227 1070 F 02 9542 5622

#### DARWIN

16/56 Marina Boulevard Cullen Bay NT 0820 T 08 8989 5601 F 08 8941 1220

#### SYDNEY

Suite 1, Level 1 101 Sussex Street Sydney NSW 2000 T 02 8536 8650 F 02 9542 5622

#### NEWCASTLE

Suites 28 & 29, Level 7 19 Bolton Street Newcastle NSW 2300 T 02 4910 0125 F 02 9542 5622

#### ARMIDALE

92 Taylor Street Armidale NSW 2350 T 02 8081 2685 F 02 9542 5622

#### WOLLONGONG

Suite 204, Level 2 62 Moore Street Austinmer NSW 2515 T 02 4201 2200 F 02 9542 5622

#### BRISBANE

Suite 1, Level 3 471 Adelaide Street Brisbane QLD 4000 T 07 3503 7192 F 07 3854 0310

#### **HUSKISSON**

Unit 1, 51 Owen Street Huskisson NSW 2540 T 02 4201 2264 F 02 9542 5622

#### NAROOMA

5/20 Canty Street Narooma NSW 2546 T 02 4302 1266 F 02 9542 5622

#### MUDGEE

Unit 1, Level 1 79 Market Street Mudgee NSW 2850 T 02 4302 1234 F 02 6372 9230

#### GOSFORD

Suite 5, Baker One 1-5 Baker Street Gosford NSW 2250 T 02 4302 1221 F 02 9542 5622

1300 646 131 www.ecoaus.com.au

# Appendix D How BOP2016 and Addendum BOP meet CoA C7 and DPE agreement

### Table 6 CoA C7 and DPE Agreement

Condition ID	Requirement	Where condition is met in BOP2016	Where condition is met in Addendum BOP
C7	Within 12 months of the commencement of construction, unless otherwise agreed by the Secretary, the Proponent shall retire biodiversity credits of a number and class specified in Tables 1A and 1B below to the satisfaction of OEH (now BCT).	Section 1.1 describes how DPE agreed to vary the timing for retiring the credits to within 5 years from commencement of operation. Section 2.1.4 and 2.2.4 describes how two offset sites will be created and managed for 7 years (from commencement of operation), until the credits are retired in the 5 <sup>th</sup> year of operation.	Table 1 summarises how the Addendum BOP meet the requirements
	<ul> <li>The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects, and can be achieved by:</li> <li>Acquiring or retiring credits under the biobanking scheme in the TSC Act;</li> <li>Making payments into an offset fund that has been established by the NSW Government; or</li> <li>Providing suitable supplementary measures.</li> </ul>	Section 2.1.2, 2.1.3 and 2.2.2, 2.2.3 describes how the biodiversity values of the two offset sites have been assessed and how they will be registered as Biobanking Sites with the BCT.	Table 4 and Table 5 shows which ecosystem credits and species credits will be sourced from Offset A and Offset B to meet the credits required for offset as specified in CoA C7 Table 1A and Table 1B. Table 4 and Table 5 details the number and type of credits that will be sourced from Offset Site B and Offset Site A.
	Note: In accordance with the credit profile agreed in Appendix 11 of the EA, Blakely's Red Gum – Yellow Box may be used to offset impacts to Manna Gum vegetation type.	Table 2 and Table 4 shows how Offset Site A provides credits for Manna Gum vegetation	Table 4 and Table 5 shows which ecosystem credits and species credits will be sourced from Offset A and Offset B to meet the credits required for offset as specified in CoA C7 Table 1A and Table 1B. Table 4 shows how Offset Site A provides credits for Manna Gum vegetation
DPE agreement to variation, 2 December 2017	The Department agrees to vary the timing for retirement of the biodiversity credits such that they may be retired up to 5 years after the commencement of operations subject to the preparation of a Biodiversity Offset Package that specifically addresses the matters identified in your letter dated 25 November 2016 and the items below.	Section 2 describes the two offset sites have been assessed, the biodiversity values at each site, the credits created at each site, the management actions and the timeline to retire the required credits from each site.	Table 2 summarises how the BOP2016 and the Addendum BOP meet the requirements of the DPE agreement

Condition ID	Requirement	Where condition is met in BOP2016	Where condition is met in Addendum BOP
	<ul> <li>The package must be prepared in consultation with OEH and submitted to the Secretary for approval, prior to the commencement of construction. At a minimum, the package must:</li> <li>be prepared in accordance with Stage 3 of the Framework for Biodiversity Assessment (FBA) including the requirements set out in Table 22 of the FBA;</li> <li>include a commitment to fund and implement the active management of both the Windemere and Rockview South offset sites for the period between the commencement of construction and the retirement of credits;</li> <li>describe the mechanisms by which the credits would be retired, including a schedule for the proposed deferred payment structure to the BioBanking Trust Fund; and</li> <li>detail the proposed management and monitoring of the offset sites, including provisions for the annual review and reporting of the monitoring outcomes to both the Department and OEH for the period between the commencement of construction and the retirement of credits.</li> </ul>	BOP2016 was approved by the DPE on 2 December 2016, an construction commenced on 9 December 2016. Section 4.6 asserts the BOP was prepared in consultation with OEH, DPE and DOEE. Section 4.3 confirms the BOP has been prepared in accordance with the FBA; and asserts the offset sites will be managed, monitored and annual reports prepared in accordance with the requirements of the registered Biobank Agreements. Section 2.1.4 and 2.2.4 details the management actions and costs at each offset site.	Table 2 summarises how the BOP2016 and the Addendum BOP meet the requirements of the DPE agreement
	The Department recognises that the final credit calculation and details of the active management and monitoring of both offset sites would need to align with the management plans for these sites approved as part of the applicable BioBanking Agreements. Accordingly, the Department recognises that the package to be submitted prior to construction would be subject to revision following formal registration of the offset areas as BioBanking sites. The Black Cypress Pine credits required under condition C7 are interchangeable with the Black Cypress Pine PCT credits proposed to	Section 1.3 explains that the BOP may be revised once final credit calculations are available. Table 3 shows how Offset B will supply the Black Cypress Pine credits	Section 1.1 summarises the purpose of the addendum BOP
	be retired from the proposed Rockview South offset site OEH supports the provision of an expert report by Dr Stephen Debus for the regent honeyeater, as per the FBA requirements.	Expert reports was prepared for Offset Site A and B by Dr Stephen Debus, dated 8 March	No change
		2017	

Squadron Energy is Australia's leading renewable energy company. Proudly Australian owned, our mission is to be a driving force in Australia's transition to a clean energy future by providing green power to our customers.

We develop, operate and own renewable energy assets in Australia, with 1.1 gigawatts (GW) of renewable energy in operation and a development pipeline of 20GW.

With proven experience and expertise across the project lifecycle, we work with local communities and our customers to lead the transition to Australia's clean energy future.

Squadron Energy acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past, present, and emerging.



# Appendix B Letter summarising compliance with Condition 2 and 2A

From:	Zeina Jokadar
To:	epbcmonitoring@dcceew.gov.au; Post Approval
Cc:	Alana Gordijn
Subject:	Sapphire Wind Farm EPBC2011/5854 Condition 2
Date:	Wednesday, 6 September 2023 3:22:57 PM
Attachments:	SWF-02-LTR-EPBC Condition 2 biodiversity offset site 20230906.pdf
	Shapenies for EPBC.21p

Dear EPBC Monitoring,

Squadron Energy (SQE) is writing on behalf of Sapphire Wind Farm Pty Ltd (SWF) in relation to Project Approval EPBC2011/5854 Condition 2 'Biodiversity offset'. The letter and shapefiles provided demonstrate the Project's compliance with the conditional offset criteria outlined in Condition 2d.

SQE is requesting agreement from the Minister regarding the fulfilment of offset requirements as described in Condition 2d.

Please feel free to contact me if you have any questions or to discuss.

Kind regards, Zeina

### Zeina Jokadar

**Squadron Energy** +61 476 882 365 6 September 2023



Department of Climate Change, Energy, Environment and Water via email: <u>EPBCMonitoring@dcceew.gov.au</u> PostApproval@dcceew.gov.au

Dear Minister,

### Sapphire Wind Farm - EPBC2011/5854 Variation 1 & 2 – Biodiversity Offset Site

Squadron Energy (SQE) is writing on behalf of Sapphire Wind Farm (SWF) to the Minister of the Department of Climate Change, Energy, the Environment and Water (DCCEEW) with reference to Condition 2 of EPBC 2011/5854 Variation 1 & 2, which states:

Prior to the commencement of construction, the approval holder must provide for The Minister's approval a Biodiversity Offset Package (Package) to protect White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community (BGW), and habitat for the Regent Honeyeater, Swift Parrot and Border Thick-tailed Gecko. The Package must:

- a. Outline the purpose of the Package;
- b. Include map/s that clearly depict BGW, Border Thick-tailed Gecko, Regent Honeyeater and Swift Parrot habitat in the offset sites;
- c. Describe how the offset sites will be legally secured and managed to ensure the enduring value of the offset; and
- d. Provide for the protection of offset sites containing at least:
  - *i.* 260 hectares of BGW at Offset Site A (Annexure A) within 18 months of the commencement of construction<sup>1</sup>;
  - *ii.* 165 hectares of habitat for the Border Thick-tailed Gecko at Offset Site B (Annexure A), or alternate offset sites for the Border Thick-tailed Gecko agreed in writing by The Minister, within five years of the commencement of operation; and
  - *iii.* 725 hectares of habitat for the Regent Honeyeater and Swift Parrot at Offset Sites A and B (Annexure A), or alternate offset sites for the Regent Honeyeater and Swift Parrot agreed in writing by The Minister, within five years of the commencement of operation.

Where an area of habitat is deemed suitable to meet the offset requirements of more than one species or community, the area of habitat may count towards the offset requirements for each species or community.

This letter provides the Minister a summary of compliance with Condition 2 and 2Ain Table 1, and provides the Minister with evidence of protection of Matters of National Environmental Significance (MNES) within the offset sites for BGW, Border Thick-tailed Gecko, Regent Honeyeater and Swift Parrot at Offset Sites A and B, in accordance with Condition 2 d) in Table 2.

SQE is requesting agreement from the Minister regarding the fulfilment of offset requirements as described in Condition 2d.

<sup>&</sup>lt;sup>1</sup> for the avoidance of doubt, the 18 month timeframe relates to the approval of the BOP, which was obtained in December 2016.

## Table 1 Summary of EPBC 2011 / 5854 Var 1&2 conditons of approval and compliance

Condition	Requirements	Compliance
Condition 2	Prior to the commencement of construction, the approval holder must provide for the Minister's approval, a Biodiversity Offset Package (BOP) to protect White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community (BGW) and habitat for the Regent Honeyeater, Swift Parrot and Border Thick-tailed Gecko'. The package must:	The BOP2016 was submitted to the Commonwealth on 7 December 2016. The Commonwealth approved the BOP (ELA, 2016) on 4 March 2018.
2(a)	Outline the purpose of the Package;	Section 1.2, 1.3 and 4.1 of BOP2016
2(b)	Include map/s that clearly depict BGW, Border Thick-tailed Gecko, Regent Honeyeater and Swift Parrot habitat in the offset sites;	Figures 4, 5, 8, 9 and 10 in Section 2 of BOP2016
2(c)	Describe how the offset sites will be legally secured and managed to ensure the enduring value of the offset; and	Section 4.4 of BOP2016
2(d)	<ul> <li>Provide for the protection of offset sites containing at least:</li> <li>i. 260 hectares of BGW at Offset Site A (Annexure A) within 18 months of the commencement of construction;</li> <li>ii. 165 hectares of habitat for the Border Thick-tailed Gecko at Offset Site B (Annexure A), or alternate offset sites for the Border Thick-tailed Gecko agreed in writing by The Minister, within five years of the commencement of operation; and</li> </ul>	<ul> <li>Section 4.4 of BOP2016</li> <li>i. Offset Site A - Windemere Biobanking Agreement (BA379), is owned by SWF. The agreement was executed on 15 February 2019. This agreement provides for the protection of the required 260 ha of BGW. A GIS shapefile will be provided outlining that area.</li> <li>ii. Offset Site B – Rockview South Biobanking Agreement (BA376) is owned by a private entity and not by the SWF. The agreement was executed on 16 January 2019. SWF will retire 1,172 Border Thick-tailed Gecko (BTG) credits from Offset Site B. BTG credits on BA376</li> </ul>
		were generated at 7.1 credits/ha, meaning that retirement of 1,172 credits is equivalent to protecting 165 ha of habitat.
	iii. 725 hectares of habitat for the Regent Honeyeater and Swift Parrot at Offset Sites A and B (Annexure A), or alternate offset sites for the Regent Honeyeater and Swift Parrot agreed in writing by The Minister, within five years of the commencement of operation.	<ul> <li>iii. Offset Site A provides for the protection of 292.28 ha of Regent Honeyeater and Swift Parrot habitat. A GIS shapefile will be provided outlining that area. As Offset Site B is owned by a private entity, the required area will be secured by retiring 3,702 credits. This is equivalent to 432.72 ha at 7.1 credits/ha. By securing 292.28 ha from Offset Site B, a total of 725 ha of Regent Honeyeater and Swift Parrot habitat will be secured.</li> </ul>
2	Where an area of habitat is deemed suitable to meet the offset requirements of more than one species or community, the area of habitat may count towards the offset requirements for each species or community.	Noted

Condition	Requirements	Compliance
Condition 2A	The approval holder must legally secure Offset Sites A and B (or alternate offset sites agreed in writing by The Minister) in	Offset Site A (Windemere) was secured with BioBanking Agreement #379 on 15 January 2019 and was registered over the title.
	accordance with the approved Package. Evidence of the legal securing of the offset must be provided to The Department within one month of the offset sites being secured, including associated GPS coordinates and shapefiles.	Offset Site B (Rockview South) was secured with BioBanking Agreement #376 on 16 January 2019 and registered over title. The Approval Holder has entered into a Biobanking Credit Acquisition Deed to acquire the credits required to meet the conditions of approval.

Table 2 Evidence of the protection of MNES within the offset sites consistent with Conditions 2 (d) of El	EPBC 2011/5854 Var 1&2
---	------------------------

Ecosystem/Species	EPBC Requirement	Source Offset Site	Evidence	Evidence
Box Gum Woodland (BGW)	260 Hectares	Offset Site A	Offset Site A - Windemere Biobanking Agreement (BA379), is owned by SWF. This agreement provides for the protection of 260 ha of BGW.	GIS shapefile of Offset Site A outlining the area of BGW.
Regent Honeyeater and Swift Parrot	725 Hectares	Offset Site A and B	Offset Site A provides for the protection of 292.28 ha of Regent Honeyeater and Swift Parrot habitat.	GIS shapefile of Offset Site A outlining the area of Regent Honeyeater and Swift Parrot
			Offset Site B provides for the protection of 432.72 ha of Regent Honeyeater and Swift Parrot habitat. Offset Site B – Rockview South Biobanking Agreement (BA376) is owned by a private entity and not by the SWF. In order to achieve compliance with this condition, SWF has retired 3,702 credits from Offset Site B. This is equivalent to 432.72 ha at 7.1 credits/ha. By securing 292.28 ha from Offset Site A and 432.72 ha from Offset Site B, a total of 725 ha of Regent Honeyeater and Swift Parrot habitat has been secured	BioBanking credit retirement report (21 August 2023). Appendix A
Border Thick-tailed Gecko	165 Hectares	Offset Site B	Offset Site B provides for the protection of 165 ha of Border Thick-tailed Gecko (BTG). SWF has retired 1,172 credits from Offset Site B. This is equivalent to 165 ha at 7.1 credits/ha.	BioBanking credit retirement report (21 August 2023). Appendix A

If you require additional information or would like to discuss further, please contact me on 0476 882 365 or zeina.jokadar@squadronenergy.com

Yours sincerely,

Calle

Zeina Jokadar Environmental Advisor For and behalf of SWF1 Operations Pty Ltd ACN 601 425 316

## Appendix A Biobanking Credit Reports



**BioBanking Information Management System** 

## **Credit retirement report**

Effective date:	21-August-2023
Transaction number:	202308-RT-869
Credit owners' details	
Credit owner ID:	769
Name of credit holder:	The Trustee for the SWF1 Operations Trust
Other owner(s):	
No other owners	
Reason for retirement:	To comply with a SSD or SSI project approval



Page 1 of 3

				Ecosystem credit	(s) retired			
Number of credits	Credit profile ID	Agreement ID	Vegetation code	Vegetation type	CMA subregion	% surrounding vegetation	Patch size	Vegetation formation(see key)
9	3,114	376	NA247	NA247/Black Cypress Pine - Orange Gum - Tumbledown Red Gum shrubby woodland on granites of the Nandewar Bioregion and New England Tableland Bioregion	Eastern Nandewars	>70%	>100 ha	DSS

				Species credit(s) retired	
Number of credits	Credit profile ID	Agreement ID	Species type	Scientific name	Common name
3,072	664	376	Fauna	Anthochaera phrygia	Regent Honeyeater
1,172	663	376	Fauna	Uvidicolus sphyrurus	Border Thick-tailed Gecko

Key to vegetation formation	s
Code	Vegetation formation
ALP	Alpine complex
ASA	Arid shrublands (Acacia)
ASC	Arid shrublands (Chenopod)
DSG	Dry sclerophyll forests (shrub/grass)
DSS	Dry sclerophyll forests (shrubby)
FRW	Forested wetlands
FWW	Freshwater wetlands
GLD	Grasslands
GRW	Grassy woodlands
HLD	Heathlands
MES	Miscellaneous ecosystems
RFT	Rainforests
SAW	Saline wetlands
SWG	Semi-arid woodlands (grassy)
SWS	Semi-arid woodlands (shrubby)
WSG	Wet sclerophyll forests (grassy)
WSS	Wet sclerophyll forests (shrubby)

The credit register provides further information about credit holdings and reports about credit trading activity. To view this information, please visit the public register website at www.environment.nsw.gov.au/bimspr/index.htm

For more information, please contact the BioBanking Scheme Manager - phone (02) 9995 6753; email biobanking@environment.nsw.gov.au

Squadron Energy is Australia's leading renewable energy company. Proudly Australian owned, our mission is to be a driving force in Australia's transition to a clean energy future by providing green power to our customers.

We develop, operate and own renewable energy assets in Australia, with 1.1 gigawatts (GW) of renewable energy in operation and a development pipeline of 20GW.

With proven experience and expertise across the project lifecycle, we work with local communities and our customers to lead the transition to Australia's clean energy future.

Squadron Energy acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past, present, and emerging.

