



Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10 km South Burra

EPBC Act Approval (2021/8958) Annual Compliance Report:
7 July 2025 – 6 July 2026

Final

September 2026

NEOEN

GOYDER SOUTH

GOYDER RENEWABLES ZONE

Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10 km South Burra

EPBC Act Approval (2021/8958) Annual
Compliance Report: 7 July 2025 – 6 July 2026

Final

Prepared by
Umwelt (Australia) Pty Limited

On behalf of
NEOEN Australia Pty Ltd

Project Director: Travis How
Project Manager: Emma Tremain
Report No.: 31492/R018
Date: September 2026



Adelaide office: 1/112 Hayward Ave, Torrensville, SA, 5031.



This report was prepared using
Umwelt's ISO 9001 certified
Quality Management System.

Acknowledgement of Country

Umwelt acknowledges the Traditional Owners of Country throughout Australia and their continuing values, culture and connection to the land, waters and sky.

We pay our respects to Elders past and present.

The below image is from the artwork *Yapung Maryiyang (Pathway Forward)* by Saretta Fielding.



Disclaimer

This document has been prepared for the sole use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied by Umwelt (Australia) Pty Ltd (Umwelt). No other party should rely on this document without the prior written consent of Umwelt.

Umwelt undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. Umwelt assumes no liability to a third party for any inaccuracies in or omissions to that information. Where this document indicates that information has been provided by third parties, Umwelt has made no independent verification of this information except as expressly stated.

©Umwelt (Australia) Pty Ltd

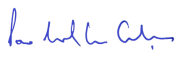
Document Status

Rev No.	Reviewer Name	Date	Approved for Issue Name	Date
V1	Dr T. How	16/09/2026	Dr T. How	16/09/2026
V2	Dr T. How	24/09/2026	Dr T. How	24/09/2026

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:

Signed by:

EF4E68BD621F439...

Full name: Pedro Gonçalves

Position: Chief Operating Officer

Organisation: Neoen Australia Pty Ltd on behalf of Goyder Wind Farm 1 Pty Ltd; ACN: 643 229 869

Date: 24/09/2026

Abbreviations

Abbreviation	Definition
BAMP	Bird Adaptive Management Plan
CEMP	Construction Environmental Management Plan
Department	The Department of Climate Change, Energy, the Environment and Water
DEW	Department for Environment and Water (South Australian)
INTG	Iron-grass Natural Temperate Grassland of South Australia
INTG TEC OMP	Iron-grass Natural Temperate Grassland of South Australia Threatened Ecological Community Offset Management Plan
MW	Megawatts
MWh	Megawatt hours
NEOEN	NEOEN Australia Pty Ltd
OMP	Offset Management Plan
OTL(s)	Overhead Transmission Line(s)
PBTL	Pygmy Blue-tongue Lizard (<i>Tiliqua adelaidensis</i>)
PBTL OMP	Pygmy Blue-tongue Lizard Offset Management Plan
PBTL Research Plan	Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan
SA	South Australia
TEC	Threatened Ecological Community
WTG(s)	Wind turbine generator(s)

Contents

Declaration of Accuracy	i
Abbreviations	ii
1.0 Introduction	1
1.1 Project Background	2
2.0 Compliance with Conditions of Approval	5

Figures

Figure 1.1	Current Proposed Stages of the Goyder South Stage 1 Project	4
------------	---	---

Tables

Table 1.1	Summary of the EPBC Approved Action and Compliance Report Details	2
Table 1.2	Current Proposed Stages and Corresponding EPBC Approvals	3
Table 2.1	Conditions of Approval Associated with the Stage 1A EPBC Approval (2021/8958) – Part A	6
Table 2.2	Part B – Standard Administrative Conditions Associated with the Stage 1A EPBC Approval (2021/8958)	26

Appendices

Appendix A	EPBC Act Approval Documentation (EPBC 2021/8958)
Appendix B	Maps of Stage 1A
Appendix C	Submission of BAMP
Appendix D	Minister’s Approval of BAMP
Appendix E	Notification to the Department of the Commencement of Commissioning

Appendix F	Minister’s Approval of PBTL OMP and INTG TEC OMP
Appendix G	Notification and Details of Non-compliance With Condition 8
Appendix H	Variation in Progress for Condition 8
Appendix I	Proclamation Published in South Australian Government Gazette
Appendix J	Request for Extension of Time for Submission of PBTL Research Plan
Appendix K	Minister’s Approval of PBTL Research Plan
Appendix L	Variation in Progress for Condition 9 and 10
Appendix M	Extract From the Signed Contract for the PBTL Research Plan
Appendix N	Notification and Details of Non-compliance With Condition 10
Appendix O	Flinders University Report on PBTL Research Undertaken at GSWF WTG SG044
Appendix P	Notification to the Department of Published Compliance Report

1.0 Introduction

Goyder Wind Farm 1 Pty Ltd received approval in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10 km south Burra (Stage 1A) on 5 July 2022 (EPBC 2021/8958). NEOEN Australia Pty Ltd (NEOEN) is contracted by Goyder Wind Farm 1 Pty Ltd to ensure compliance with the EPBC Act approval, which is subject to specific conditions of approval (refer to **Appendix A** for the approval documentation).

In particular, condition 17 refers to annual compliance reporting, as follows:

17. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:
 - a. Publish each **compliance report** on the website within 60 **business days** following the relevant 12 month period.
 - b. Notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within 5 **business days** of the date of publication.
 - c. Keep all **compliance reports** publicly available on the **website** until this approval expires.
 - d. Exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**.
 - e. Where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

Note: Compliance reports may be published on the **Department's** website.

As such this document has been prepared to provide an annual **compliance report** for Stage 1A of the Goyder South Hybrid Renewable Energy Facility (EPBC 2021/8958), which is commonly referred to as Goyder South Wind Farm (GSWF) and commenced on 7 July 2022. This is the fourth annual **compliance report** for Stage 1A and applies to the fourth 12 months of the Project, from 7 July 2025 to 6 July 2026. During this timeframe:

- Construction works have been completed, and site rehabilitation works have been undertaken where appropriate.
- Operation of the wind farm continued (after commencing on 31/03/2025).
- Maintenance of WTGs and associated infrastructure commenced and is ongoing.

A summary of the approved action and **compliance report** details is provided in **Table 1.1** on the following page.

Table 1.1 Summary of the EPBC Approved Action and Compliance Report Details

EPBC number:	2021/8958
Project name:	Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10 km south Burra (referred to as Stage 1A).
Approval holder:	Goyder Wind Farm 1 Pty Ltd
Approval holder ACN / ABN:	643 229 869
The approved action:	To construct and operate up to 38 wind turbine generators and associated infrastructure as part of the Goyder South Hybrid Renewable Energy Facility, approximately 10 km south of Burra, South Australia.
Location of the Project:	Approximately 10 km south of Burra, South Australia (refer to Figure 1.1).
Person accepting responsibility for the report:	Pedro Gonçalves
Date of commencement of the action:	7 July 2022
Annual compliance report reporting period:	7 July 2025 to 6 July 2026 (inclusive)
Date of preparation of this annual compliance report:	24 September 2026

1.1 Project Background

NEOEN is developing the Goyder South Hybrid Renewable Energy Facility (the Goyder South Project; the Project) between Burra and Robertstown in the Mid North of South Australia (SA). The Project combines wind, solar and energy storage in one integrated project and will be capable of delivering a steady, reliable, dispatchable output of power throughout the day and night. The Goyder South Project will generate more than 4,800,000 Megawatt hours (MWh) of power annually and is comprised of:

- A wind farm of up to 163 turbines with a capacity of up to 1200 Megawatts (MW), a maximum hub height of 121 m, a maximum blade length of 78 m and an overall maximum height (tip height) of 199 m.
- A solar farm (across two sites) of up to 3,000 ha of solar panels with a capacity of up to 600 MW.
- An energy storage facility (lithium-ion battery) with a capacity of up to 900 MW / 1,800 MWh (2 hours).
- Associated infrastructure for connection to the electricity grid including three substations, access tracks, underground connection cabling and overhead transmission lines (OTLs).
- Permanent operations and maintenance compounds.
- Temporary construction compounds for both wind and solar components, including concrete batching plants.

- A number of meteorological masts (in addition to those already on the site) to record wind speed and other meteorological data, both pre- and post- construction.

As the Goyder South Project will total up to \$3 billion in investment, NEOEN are implementing the Project in stages, with each stage having its own legal entity, construction contracts and financing packages. An overview of each stage currently proposed for development, along with the corresponding EPBC approvals sought and obtained is outlined in **Table 1.2**.

Table 1.2 Current Proposed Stages and Corresponding EPBC Approvals

Project Stage / Proposed Action	Legal Entity	EPBC Reference	EPBC Referral Decision	Date EPBC Approval Received	EPBC Variation
Stage 1A (38 WTGs and associated infrastructure)	Goyder Wind Farm 1A Pty Ltd	2021/8958	Controlled Action	5/07/2022	Variation in progress
Stage 1B (37 WTGs and associated infrastructure)	Goyder Wind Farm 1B Pty Ltd	2021/8957	Controlled Action	15/08/2022	Variation received 28/10/2025
Common Asset (OTL and Substation)	Goyder Wind Farm Common Asset Pty Ltd	2021/8959	Controlled Action	22/08/2022	Variation received 19/12/2022
Battery	NEOEN Australia Pty Ltd	2021/8960	Not a Controlled Action	N/A	N/A

Each of the currently proposed stages of the Project are shown in **Figure 1.1**. Other components of the Goyder South Project, including the remaining wind farm areas, the two solar farms, overhead transmission lines and substations are considered to be potential future stages as they are not currently commercially viable and there is currently no immediate prospect of these components / stages proceeding to construction.

As stated previously, this annual **compliance report** is for Stage 1A (EPBC 2021/8958) of the Goyder South Project (GSWF – Stage 1A). Annual compliance reports for Stage 1B (2021/8957) and the Common Asset (2021/8959) components of the Goyder South Project are prepared separately.

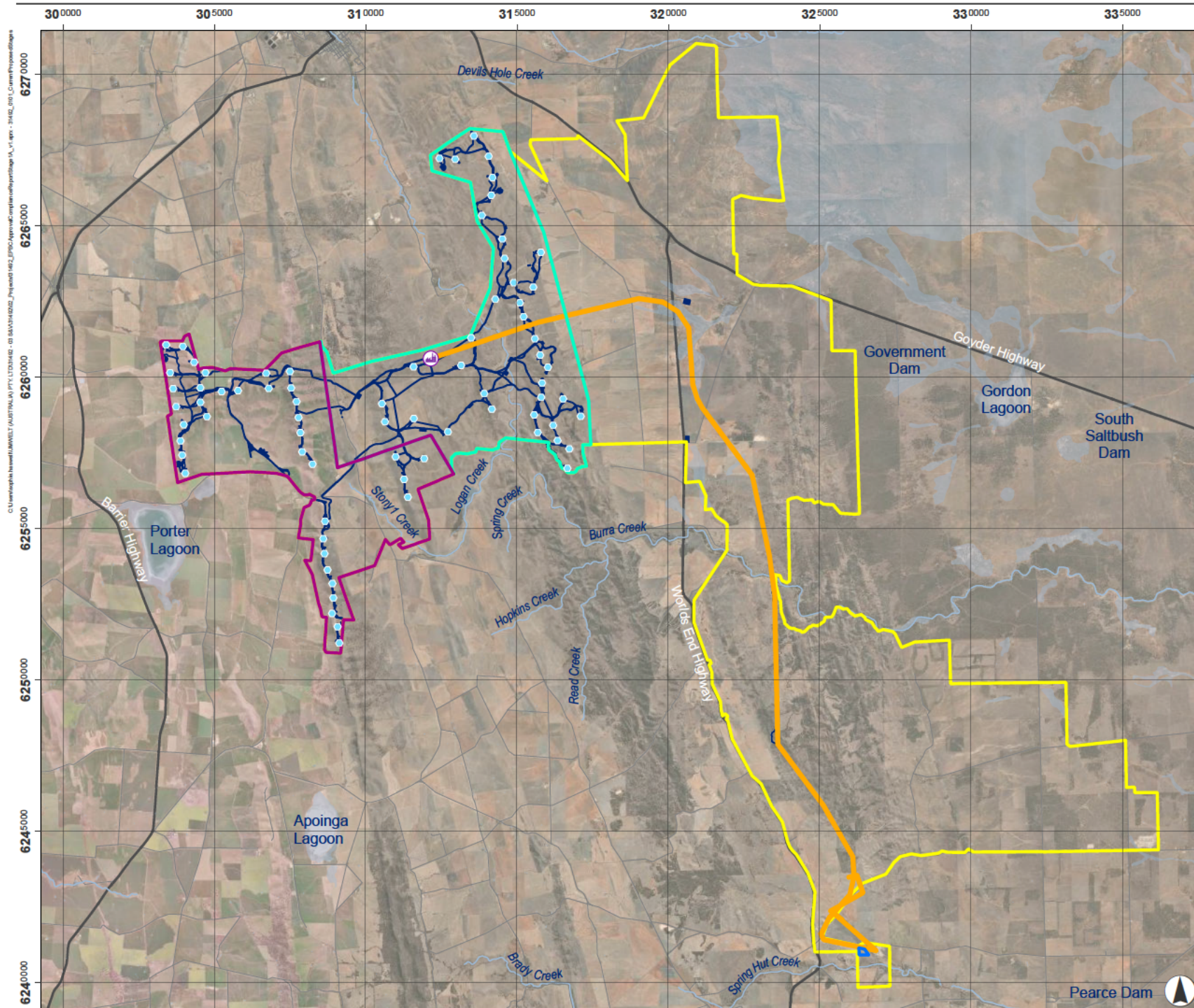
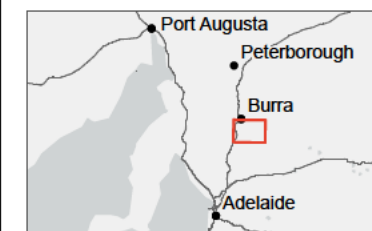


FIGURE 1.1
Current Proposed Stages
of the Goyder South
Stage 1 Project

- Project area
- Goyder South Infrastructure
- Substation west
- WTG
- Main road
- Local road
- Water course
- Water body
- Goyder South wind farm project areas
- Stage 1A
- Stage 1B
- Transmission line
- Battery site



0 2 4
Kilometres

Scale 1:175,000 at A4
GDA2020 MGA Zone 54

This document and the information are subject to Terms and Conditions and Umwelt (Australia) Pty Ltd ("Umwelt") Copyright in the drawings, information and data recorded ("the information") is the property of Umwelt. This document and the information are solely for the use of the authorized recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that which it was supplied by Umwelt. Umwelt makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

APPROVED FOR AND ON BEHALF OF Umwelt

2.0 Compliance with Conditions of Approval

Compliance with the conditions associated with the Stage 1A EPBC approval (EPBC 2021/8958) is presented in **Table 2.1** and **Table 2.2** on the following pages for the applicable annual compliance report timeframe of 7 July 2025 to 6 July 2026.

Except for four non-compliances (with conditions 1.b., 8, 9 and 10), compliance has been achieved for all other conditions of approval applicable to the timeframe of this annual **compliance report** (7 July 2025 to 6 July 2026), while several conditions of approval are not applicable to this annual **compliance report**. A non-compliance report for condition 1.b. was completed and provided to the **Department** on 14 October 2024, and non-compliance reports for condition 8, and condition 9 and 10, were completed and provided to the Department on 24 September 2025. Furthermore, a proposed variation to EPBC 2021/8958 is currently underway with the **Department** to rectify compliance with conditions 1.b., 8, 9 and 10.

Table 2.1 Conditions of Approval Associated with the Stage 1A EPBC Approval (2021/8958) – Part A

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
Construction/clearance limits 1. To minimise impacts to protected matters , the approval holder must not: a. Construct more than 38 wind turbine generators within the project area.	Compliant.	The approval holder has constructed 38 wind turbine generators (WTGs) within the Stage 1A project area . Refer to Appendix B for a map showing the Stage 1A project area and WTGs constructed.
b. Clear outside the project area.	Non-compliant. Variation in progress.	Note that the timeframe applicable to this compliance report is 7 July 2025 to 6 July 2026. However, information prior to this timeframe is also provided for context. Clearance outside the project area was identified in August 2024 and investigated by the approval holder. Review of spatial data provided by Elecnor (the construction contractor) identified a minor amount of clearance just beyond the project area boundary. The clearance occurred between 28-29 March 2023 and was associated with construction works to install medium voltage cable between WTGs. The approval holder notified the Department of the non-compliance on 30 September 2024, in accordance with approval condition 18. A non-compliance report was completed and provided to the Department on 14 October 2024, in accordance with approval condition 19. Refer to the compliance report for 7 July 2024 to 6 July 2025 for more information. A proposed variation to EPBC 2021/8958 is currently underway with the Department to address this non-compliance.
c. Clear more than 8.04 ha of Pygmy Blue-tongue Lizard habitat within the project area.	Compliant.	The approval holder has not cleared more than 8.04 ha of Pygmy Blue-tongue Lizard habitat within the Stage 1A project area . A total of 6.67 ha of Pygmy Blue-tongue Lizard habitat has been cleared since commencement of the action. Refer to Appendix B for mapping showing Pygmy Blue-tongue Lizard habitat (Pre-EPBC Act Approval)

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		and PBTL habitat Post-EPBC Act Approval within the Stage 1A project area and impacts from construction of project infrastructure. Refer to the PBTL Management Plan for more information on PBTL habitat “Pre-EPBC Act Approval” and PBTL habitat “Post-EPBC Act Approval”.
d. Clear more than 18 individual plants of Trailing Hop-bush within the project area ; and	Compliant.	The approval holder has not cleared any individual plants of Trailing Hop-bush within the project area . Refer to Appendix B for mapping showing the Stage 1A project area and the Trailing Hop-bush plants within the project area .
e. Clear more than 12.67 ha of the Iron-grass Natural Temperate Grassland of South Australia TEC within the project area .	Compliant.	The approval holder has not cleared more than 12.67 ha of the Iron-grass Natural Temperate Grassland of South Australia TEC within the Stage 1A project area . A total of 9.41 ha of Iron-grass Natural Temperate Grassland of South Australia TEC has been cleared since commencement of the action. Refer to Appendix B for mapping showing Iron-grass Natural Temperate Grassland of South Australia TEC within the Stage 1A project area and impact to it from construction of project infrastructure.
Environmental Management Plans 2. To minimise impacts to protected matters during the construction and operation of the wind farm, the approval holder must implement the Construction Environmental Management Plan (CEMP) as required under condition 9 of the SA development approval .	Compliant.	The approval holder has implemented the Construction Environmental Management Plan (CEMP) required under condition 9 of the SA development approval , since the action commenced on 7 July 2022. The approval holder intends to continue to implement the CEMP. The CEMP is available on the Project’s website at: https://goyderenergy.com.au/wp-content/uploads/2023/01/GSWF-ELECNOR-EHS-PLN-0005-Rev-13-Construction-Environmental-Management-Plan.pdf
3. For the protection of the Pygmy Blue-tongue Lizard , the approval holder must implement the	Compliant.	The approval holder has implemented the PBTL Management Plan since the action commenced on 7 July 2022 and intends to continue to implement it for the duration of the EPBC approval.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
PBTL Management Plan for the duration of this approval.		The PBTL Management Plan is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2024/02/PBTL_Man_Plan_Final_20231130_Redacted_20240207_opt.pdf
4. For the protection of the Iron-grass Natural Temperate Grassland of South Australia TEC , the approval holder must implement the INTG TEC Management Plan for the duration of this approval.	Compliant.	The approval holder has implemented the INTG TEC Management Plan since the action commenced on 7 July 2022 and intends to continue to implement it for the duration of the EPBC approval. The INTG TEC Management Plan is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2023/01/INTG_TEC_Man_Plan_Final_20220628.pdf
Bird Adaptive Management Plan 5. The approval holder must submit to the Department for the Minister's approval a Bird Adaptive Management Plan (BAMP) within 12 months of the date of this approval. The environmental objectives of the BAMP are to effectively monitor for any impacts to listed bird species during the operation of the wind farm from (but not limited to) wind turbine strikes and, if any impacts are detected, to implement the technology, measures and procedures necessary to ensure that the impacts are accurately measured, reported and remain insignificant.	Compliant.	The approval holder submitted a Bird Adaptive Management Plan (BAMP) to the Department for the Minister's approval on 5 July 2023, within 12 months of the date of the EPBC approval (5 July 2022) (refer to Appendix C for submission email). Note that the BAMP was submitted prior to the timeframe applicable to this compliance report (7 July 2025 to 6 July 2026) but this information is included in this compliance report for context. The BAMP was specifically prepared to satisfy the requirements of this condition of approval. The approval holder received feedback from the Department on the BAMP and revised the BAMP to address the Department's feedback. The final version of the BAMP (version 5, dated 24/01/2024) was approved by the Minister on 23 February 2024 (refer to Appendix D for details). As stated in Section 2 of the BAMP, the overall environmental objectives of the BAMP are to effectively monitor for any impacts to listed bird species during the operation of the wind farm from (but not limited to) wind turbine strikes and, if any impacts are detected, to implement the

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		technology, measures and procedures necessary to ensure that the impacts are accurately measured, reported and remain insignificant.
The BAMP must:	Compliant.	The BAMP was prepared in accordance with the Environmental Management Plan Guidelines (Commonwealth of Australia 2014).
a. Be consistent with the Environmental Management Plan Guidelines .		
b. Specify relevant protected matters , and reference to the EPBC Act approval conditions to which the BAMP refers.	Compliant.	EPBC Act approval conditions to which the BAMP refers to are referenced and set out in BAMP Section 2.1.1, including Table 2. As stated in Table 2 in Section 2.1.1 of the BAMP, a total of 11 relevant EPBC Act listed threatened and/or migratory bird species have been identified as species of concern (refer to BAMP Section 4.1 for more detail).
c. Include a table of commitments to achieve the BAMP's environmental objectives and a reference to where the commitments are detailed in the BAMP.	Compliant.	The BAMP includes a table (BAMP Section 2, Table 1) of commitments to achieve the BAMP's environmental objectives. The table of commitments includes references to where the commitments are detailed in the BAMP.
d. Include an assessment of risks to achieving the BAMP's environmental objectives and risk management strategies that will be applied.	Compliant.	The BAMP includes an assessment of risks to achieving the BAMP's environmental objectives and risk management strategies that will be applied. Refer to BAMP Section 6 for more detail.
e. Include a post- commissioning long-term wind turbine generator collision monitoring program to detect and manage potential impacts to listed bird species as a result of collision, which must:	Compliant.	The BAMP includes a post-commissioning long-term WTG collision monitoring program, as part of the BAMP's bird monitoring program, to detect and manage potential impacts to listed bird species as a result of collision. Refer to BAMP Section 8.3.3 (and sub-sections) for more detail.
i. Contain details of the nature, timing and frequency of monitoring to inform progress against achieving the	Compliant.	The BAMP contains details of the nature, timing and frequency of monitoring to inform progress against achieving the environmental outcomes and be sufficient to determine whether the BAMP is likely to

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
environmental outcomes and be sufficient to determine whether the BAMP is likely to achieve those environmental outcomes in adequate time to implement all necessary corrective actions;		achieve those environmental objectives in adequate time to implement all necessary corrective actions. As detailed in Section 8.3.3.1 and 8.3.3.2 of the BAMP, twenty-six (26) WTGs, are proposed to be monitored on a quarterly basis for the duration of the bird monitoring program. Analysis of the results of the proposed monitoring is expected to inform progress against achieving the environmental outcomes and be sufficient to determine whether the BAMP is likely to achieve those environmental objectives in adequate time to implement all necessary corrective actions.
ii. Include the findings of exhaustive pre- commissioning scavenger activity and searcher efficiency trials.	Compliant.	Section 8.2.1 of the BAMP includes the results of pre-commissioning scavenger activity and searcher efficiency trials.
iii. Demonstrate how site-specific and species-specific risks and uncertainties (for example, findings of the pre- commissioning scavenger activity and searcher efficiency trials) have informed the design of the monitoring program.	Compliant.	The results of pre-commissioning scavenger activity and searcher efficiency trials were used to inform the design of the monitoring program and will be used to assist with interpretation of data collected during the long-term WTG collision monitoring program and estimation of annual mortality rates. Furthermore, as part of the BAMP's bird monitoring program, additional scavenger activity and searcher efficiency trials have been undertaken during the bird monitoring program to ensure site-specific and species-specific risks and uncertainties continue to be appropriately considered during implementation of the monitoring program, including data analysis and estimation of annual mortality rates. Refer to Section 8.3.3.1 of the BAMP for more detail.
iv. Contain commitments to DNA test carcasses that cannot be otherwise identified by a suitably qualified bird expert , to undertake further periodic carcass persistence and searcher	Compliant.	The BAMP contains commitments to DNA test carcasses that cannot be otherwise identified by a suitably qualified bird expert (refer to BAMP Section 8.3.7), to undertake further periodic carcass persistence and searcher efficiency trials to check if assumptions need revision, to maximise turbine collision detection in a timely manner, and to maximise

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
efficiency trials to check if assumptions need revision, to maximise turbine collision detection in a timely manner, and to maximise carcass detection in a timely manner.		carcass detection in a timely manner (refer to BAMP Section 8.3.4 and sub-sections).
f. Include reporting commitments and timeframes for the provision of site-specific and species-specific information, which must: i. Contain annual turbine strike reports comprising raw data and strike notifications, survey methodologies, results of detection/persistence trials, environmental/meteorological conditions, and associated statistical analysis.	Compliant.	The BAMP includes reporting commitments and timeframes for the provision of site-specific and species specific information, which contains annual turbine strike reports comprising raw data and strike notifications, survey methodologies, results of detection/persistence trials, environmental/meteorological conditions, and associated statistical analysis. Refer to BAMP Section 8.5 for more detail. <i>The Goyder South Hybrid Renewable Energy Facility – Stage 1: Stage 1A and Stage 1B Bird Adaptive Management Plan Annual Implementation Report 2024</i> was submitted to the Department with the <i>Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10 km South Burra: EPBC Act Approval (2021/8958) Annual Compliance Report: 7 July 2024 – 6 July 2025</i>. Similarly, the <i>Goyder South Hybrid Renewable Energy Facility – Stage 1: Stage 1A and Stage 1B Bird Adaptive Management Plan Annual Implementation Report 2025</i> has been submitted to the Department with this annual compliance report. Refer to the BAMP Annual Implementation Report 2025 for details of turbine strikes, survey methodologies, results of detection/persistence trials environmental/meteorological conditions, and associated statistical analysis.
ii. Contain estimation of annual mortality rate for each listed bird species comprising supporting evidence from case studies of listed bird species	Compliant.	The BAMP includes reporting commitments and timeframes for the provision of site-specific and species specific information, which contain estimation of annual mortality rate for each listed bird species comprising supporting evidence from case studies of listed bird species

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
carcass size classes, results of persistence trials and searcher efficiency trials, annual probability of detection and monthly strike monitoring, and collision monitoring protocol and survey effort.		carcass size classes, results of persistence trials and searcher efficiency trials, annual probability of detection and monthly strike monitoring, and collision monitoring protocol and survey effort. Refer to Section 10.2 of the BAMP Annual Implementation Report 2025 for an estimation of annual mortality rate, comprising of supporting evidence from case studies, carcass size classes, results of persistence trials and searcher efficiency trials, annual probability of detection and strike monitoring, and collision monitoring protocol and survey effort.
iii. Contain species occurrence records prepared in accordance with the Guidelines for Biological Survey and Mapped Data .	Compliant.	Species occurrence records associated with the BAMP Annual Implementation Report 2025 have been prepared in accordance with the Guidelines for Biological Survey and Mapped Data and submitted to the Department .
g. Include an adaptative management framework designed to:	Compliant.	The BAMP includes an adaptive management framework (refer to BAMP Section 9 for more detail).
i. Ensure that no significant impacts to listed bird species are likely to occur as a result of the action.	Compliant.	Part of the overall environmental objective of the BAMP is to implement measures and procedures necessary to ensure that no significant impacts to listed bird species occur as a result of operation of the wind farms. The adaptive management framework includes an adaptive management protocol to investigate and respond to a carcass find (which includes implementation of adaptive management measures to prevent further collisions); and to determine if a significant impact has occurred or is likely to have occurred. Refer to BAMP Section 9 for more detail.
ii. Clearly demonstrate the linkages between environmental outcomes, implementation and management measures, monitoring, reporting and investigations, and implementation of corrective actions to ensure the	Compliant.	To achieve the objectives of the BAMP, various actions will be undertaken within five main tasks (outlined in Table 1 in the BAMP): • Monitor • Analyse • Manage, Mitigate and Adapt

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
environmental outcomes will be achieved.		• Report, and • Review and Improve. Commitments to achieve the BAMP's environmental objectives are associated with each of these tasks. All data collected during the bird monitoring program (Section 8 of the BAMP) will be analysed to understand bird activity and potential impacts (WTG collisions) across the wind farms, and inform assessment to determine the most appropriate management action(s) to implement to minimise further impacts. The adaptive management framework (Section 9 of the BAMP) includes monitoring to determine the effectiveness of implemented adaptive management action(s) and whether further actions are required. Data analysis also includes estimation of annual mortality rates, which will be used to assist with determining if a significant impact has occurred or is likely to have occurred. All data, analysis and results associated with the bird monitoring program and implementation of the adaptive management framework will be presented in an annual report, with information and knowledge expanding cumulatively each year during implementation of the BAMP. Furthermore, annual review of the BAMP will identify any improvements that might be required and will ensure the environmental objectives are being achieved. As stated previously, the <i>Goyder South Hybrid Renewable Energy Facility – Stage 1: Stage 1A and Stage 1B Bird Adaptive Management Plan Annual Implementation Report 2025</i> has been prepared and submitted to the Department, and Section 12 details progress on the BAMP's environmental objectives.
iii. Incorporate site-specific data collected through ongoing monitoring activities, and to take into account changes to turbine risk ratings.	Compliant.	The BAMP's adaptive management framework (BAMP Section 9 and sub-sections) includes incorporation of site-specific data collected through ongoing monitoring activities, and takes into account changes to turbine risk ratings.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		All site-specific data collected during the bird monitoring program (including bird utilisation surveys, WTG collision monitoring, periodic carcass persistence (scavenger activity) and searcher efficiency trials, and opportunistic observations) will be analysed to review, adjust, and if required, assign WTG high risk ratings.
iv. Propose corrective actions if triggers are reached, such as bird and insect deterrents, low wind speed curtailments, wind turbine generator temporary or permanent shutdown, and/or permanent decommissioning of specific wind turbine generators.	Compliant.	The BAMP's adaptive management framework (BAMP Section 9 and sub-sections) includes implementation of corrective actions (i.e., adaptive management actions) such as management of WTG(s) during seasonal nesting, management of WTG(s) during periodic environmental conditions and/or events, temporary shutdown specific WTG(s), permanently shut down specific WTG(s) and permanently decommission specific WTG(s). Other potential adaptive management aspects including insect deterrents, lighting and low wind speed curtailment, have been considered as part of the adaptive management framework but are not relevant to this BAMP as they are usually considered to reduce impacts to bats and bats are not of concern for this BAMP.
h. Commit that, if significant impacts to listed bird species occur, or are likely to have occurred, as a result of the action, the approval holder will, within 3 months of becoming aware of any actual or likely significant impact , submit to the Department for the approval of the Minister a revised BAMP responding to, and accompanied by, an evaluation report prepared by a suitably qualified bird expert of the effectiveness of the BAMP in preventing significant impacts to listed bird species .	Compliant.	The BAMP's adaptive management framework (BAMP Section 9 and sub-sections) incorporates an adaptive management protocol which includes a process to determine if a significant impact has occurred or is likely to have occurred. If a significant impact has occurred or is likely to have occurred, as a result of the action, a revised BAMP will be submitted to the Department for approval of the Minister within 3 months of becoming aware of the significant impact. The revised BAMP will be accompanied by an evaluation report prepared by a suitably qualified bird expert of the effectiveness of the BAMP in preventing significant impacts to EPBC Act listed bird species .

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
The approval holder must not commission unless the BAMP has been approved by the Minister in writing. The approval holder must commence implementing the approved BAMP before commissioning and continue implementing the approved BAMP until the completion of the action.	Compliant.	The BAMP (version 5, dated 24/01/2024) was approved by the Minister on 23 February 2024 (refer to Appendix D for details). Commissioning commenced on 4 April 2024 (refer to Appendix E for notification to the Department), which is after the BAMP had been approved by the Minister in writing. As such, the approval holder did not commission until after the BAMP was approved by the Minister in writing. The first Bird Utilisation Survey (BUS; a component of the Bird Monitoring Program within the BAMP) was undertaken on 19-21 December 2023. As such, the approval holder commenced implementing the approved BAMP prior to commissioning. The approval holder has continued to implement the BAMP since commissioning, including during the timeframe applicable to this compliance report (7 July 2025 to 6 July 2026), and intends to continue implementing the approved BAMP until completion of the action.
Environmental offsets <i>Offset Management Plan</i> 6. To compensate for residual significant impacts to the Pygmy Blue-tongue lizard and the Iron-grass Natural Temperate Grassland of South Australia TEC, the approval holder must submit to the Department for the Minister's approval an Offset Management Plan (OMP) within 6 months of the date of this approval.	Compliant.	The approval holder submitted a Pygmy Blue-tongue Lizard Offset Management Plan (PBTL OMP) and an Iron-Grass Natural Temperate Grassland Threatened Ecological Community of South Australia Offset Management Plan (INTG TEC OMP) to the Department on 5 January 2023, within 6 months of the date of the approval (5 July 2022). Evidence of submission was provided in a previous annual compliance report (7 July 2022 to 6 July 2023). Each plan was subject to revision after feedback was received from the Department. A final revised version of the PBTL OMP (version 5, dated 29/09/2023) was submitted to the Department on 29 September 2023. A final revised version of the INTG TEC OMP (version 5, dated 29/09/2023) was submitted to the Department on 3 October 2023.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		Each OMP was specifically prepared to satisfy the requirements of this condition of approval. Neoen received Minister's approval of these plans on 29/01/2024 (refer to Appendix F for details).
The OMP must:	Compliant.	Each OMP was prepared in accordance with the Environmental Management Plan Guidelines (Commonwealth of Australia 2014).
a. Be consistent with the Environmental Management Plan Guidelines ;		
b. Include a reference to the EPBC Act approval conditions to which the OMP refers.	Compliant.	Each OMP includes reference to the EPBC Act approval conditions to which the OMP refers. Refer to Section 2.2 in the PBTL OMP and Section 2.2 in the INTG TEC OMP.
c. Include summary information on the residual significant impacts to the Pygmy Blue-tongue Lizard and the Iron-grass Natural Temperate Grassland of South Australia TEC that will be compensated for by the offset(s).	Compliant.	Each OMP includes summary information on the residual significant impacts to the PBTL and the INTG TEC (as appropriate) that will be compensated for by the offset. Refer to Section 3.6 in the PBTL OMP and Section 3.6 in the INTG TEC OMP.
d. Identify a suitable environmental offset(s) to compensate for residual significant impacts to the Pygmy Blue-tongue lizard and the Iron-grass Natural Temperate Grassland of South Australia TEC that meets the requirements of the Environmental Offsets Policy to the satisfaction of the Minister .	Compliant.	Each OMP identifies a suitable environmental offset to compensate for residual significant impacts to PBTL and INTG TEC that meets the requirements of the Environmental Offsets Policy to the satisfaction of the Minister . Refer to Section 4 in the PBTL OMP and Section 4 in the INTG TEC OMP. As stated previously, Minister's approval of these OMPs was provided on 29/01/2024 (refer to Appendix F for details).
e. Include detailed baseline habitat quality information on the proposed offset(s).	Compliant.	Each OMP includes detailed baseline habitat quality information on the proposed offsets. Refer to Section 4 in the PBTL OMP and Section 4 in the INTG TEC OMP.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
f. Commit to achievable ecological benefits and provide timeframes for their achievement.	Compliant.	Each OMP commits to achievable ecological benefits and provides timeframes for their achievement. Refer to Section 6.1 and 6.3 in the PBTL OMP, and Section 6.1 in the INTG TEC OMP.
g. Detail how the offset(s) will be protected, and ecological benefits maintained.	Compliant.	Each OMP details how the offset will be protected, and ecological benefits maintained. Refer to Section 4.7 and 6.1 in the PBTL OMP, and Section 4.8 and 6.1 in the INTG TEC OMP.
h. Describe the monitoring program(s) to be implemented that will determine progress towards attainment of and maintenance of the ecological benefits at the proposed offset(s), which must include:	Compliant.	Each OMP describes the monitoring program(s) to be implemented that will determine progress towards attainment of and maintenance of the ecological benefits at the proposed offset(s). Refer to Section 6.5 in the PBTL OMP and Section 6.5 in the INTG TEC OMP.
i. measurable performance indicators to monitor attainment of the ecological benefits;	Compliant.	Each OMP includes measurable performance indicators to monitor attainment of the ecological benefits. Refer to Section 6.5 in the PBTL OMP and Section 6.5 in the INTG TEC OMP.
ii. trigger values for corrective actions; and	Compliant.	Each OMP includes trigger values for corrective actions. Refer to Section 6.5 in the PBTL OMP and Section 6.5 in the INTG TEC OMP.
iii. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators.	Compliant.	Each OMP includes the timing and frequency of monitoring to detect trigger values and changes in the performance indicators. Refer to Section 6.5 in the PBTL OMP and Section 6.5 in the INTG TEC OMP.
i. Include an assessment of risks to achieving the ecological benefit(s) and what risk management strategies will be applied to address these.	Compliant.	Each OMP includes an assessment of risks to achieving the ecological benefit(s) and what risk management strategies will be applied to address these. Refer to Section 6.4 in the PBTL OMP and Section 6.4 in the INTG TEC OMP.
j. Specify how and at what frequency offset(s) management results, monitoring program findings and assessments of ecological	Compliant.	Each OMP specifies how and at what frequency offset management results, monitoring program findings and assessments of ecological benefits will be reported to the Department and the public. Refer to Section 6.3.9 in the PBTL OMP and Section 6.3.6 in the INTG TEC OMP.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
benefits will be reported to the Department and the public.		
k. Propose corrective actions to ensure ecological benefits are attained or maintained, if trigger values are reached or performance indicators not attained.	Compliant.	Each OMP proposes corrective actions to ensure ecological benefits are attained or maintained, if trigger values are reached or performance indicators not attained. Refer to Section 6.3 (Table 18) and Section 6.3.11 in the PBTL OMP, and Section 6.3 (Table 16) and Section 6.3.8 in the INTG TEC OMP.
l. Include links to referenced plans and applicable conditions of approval (including State approval conditions), if any.	Compliant.	Each OMP includes links to referenced plans and applicable conditions of approval. Refer to Section 2.1 and 2.2 in the PBTL OMP and Section 2.1 and 2.2 in the INTG TEC OMP.
m. Specify and justify the period for which the OMP will be implemented.	Compliant.	Each OMP specifies and justifies the period for which the OMP will be implemented. Refer to Section 6.3.1 in the PBTL OMP and Section 6.3.1 in the INTG TEC OMP.
The approval holder must not commence commissioning until the OMP has been approved by the Minister in writing. The approval holder must implement the approved OMP for the period specified in the approved OMP.	Compliant.	As stated previously, Minister's approval of these OMPs was provided on 29/01/2024 (refer to Appendix F for details). The approval holder commenced commissioning on 4 April 2024 (refer to Appendix E for notification to the Department), which is after the PBTL OMP and INTG TEC OMP had been approved by the Minister in writing. As such, the approval holder did not commence commissioning until after each OMP had been approved by the Minister in writing. The approval holder commenced implementing the approved OMPs on 29/01/2024 and intends to continue implementing them for the period specified in each approved OMP.
7. If the OMP (required under condition 6) has not been approved by the Minister in writing within 18 months of the date of this approval, and the Minister notifies the approval holder that the submitted OMP is not suitable for approval, the	Not applicable.	The OMPs (required under condition 6) were approved by the Minister on 29/01/2024 (which is within 18 months of the date of the approval). The Minister has not notified the approval holder that the submitted OMPs are not suitable for approval. As such, this condition is not applicable.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
Minister may, at least 2 months after so notifying the approval holder, approve a version of the OMP revised by the Department .		
8. The approval holder must provide written evidence to the Department that the offset site(s) required under the approved OMP has/have been acquired and secured within 12 months of the OMP approval date. The written evidence must identify the legal securing mechanism by which each offset site will be permanently protected for conservation. Note: The approval holder may choose to submit separate Offset Management Plans (OMPs) for the Pygmy Blue-tongue Lizard and the Iron-grass Natural Temperate Grassland of South Australia TEC instead of a single OMP. Note: The approval holder may choose to combine the OMPs required as conditions of approval for other proposed elements of the Goyder South Hybrid Renewable Energy Facility for the same protected matters. In this case, the approval holder must clearly demonstrate how the offset requirement(s) for each individual proposed element is being met and identify unique offset area(s) for each approved action geospatially.	Non-compliant. Variation in progress.	Note that the timeframe applicable to this compliance report is 7 July 2025 to 6 July 2026. However, information prior to this timeframe is also provided for context. The OMPs (required under condition 6) were approved by the Minister on 29/01/2024. PBTL Offset The approval holder provided written evidence to the Department on 11 April 2025 (prior to the timeframe applicable to this compliance report) that the PBTL offset site required under the approved PBTL OMP had been acquired and secured. The approval holder purchased the land containing the PBTL Offset Area and transferred ownership to the SA Minister for Climate, Environment and Water (The Crown / State of South Australia) on 5 September 2023. The approval holder executed a legal agreement, the Gorge Management Agreement (GMA), with the SA Minister for Climate, Environment and Water (The Crown / State of South Australia) on 5 September 2023. The approval holder provided a copy of the GMA to the Department on 11 April 2025. The GMA requires the SA Minister for Climate, Environment and Water to take steps to revert the land to Crown Land and enable it to be constituted as a National Park, in accordance with the National Parks and Wildlife Act 1972, for protection in perpetuity. The National Parks and Wildlife Service within the SA Department for Environment and Water is managing the land within the PBTL Offset Area in accordance with the PBTL OMP and the GMA.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		The GMA is the legal securing mechanism by which the PBTL Offset Area has been secured, and the PBTL Offset Area has been, and is continuing to be, managed in accordance with the PBTL OMP. As such, whilst the written evidence was provided to the Department on 11 April 2025, which is beyond the required timeframe, the legal securing mechanism was secured prior to the deadline of 12 months from the OMP approval date. The approval holder is aware that the written evidence was provided to the Department after the 12-month timeframe, which does not comply with this condition of approval. As such, notification of, and further details on, the non-compliance for the late submission of the written evidence for securing the offset site was submitted to the Department on 24 September 2025 in accordance with condition 18 and condition 19 (Appendix G). A proposed variation to EPBC 2021/8958 is currently underway with the Department that includes an extension of the timeframe to establish the legal securing mechanism for the PBTL offset site (Appendix H). Despite the establishment of the GMA, this variation will ensure that the legal securing mechanism for the PBTL offset site, (the proclamation of the land as a National Park) is achieved within the timeframe specified in the approval condition. The land was officially constituted as a National Park and assigned the name <i>Jaki Ina – Worlds End Gorge National Park</i> via proclamation made by the Governor of South Australia on 20 November 2025 (Appendix I). <u>INTG TEC Offset</u> The approval holder has established a legal Agreement with the landholder hosting the INTG TEC offset area. The offset area required under the approved INTG TEC OMP was secured through a formal Agreement on 18 January 2025. The approval holder provided a copy of this Agreement to the Department on 24 January 2025.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		Furthermore, the approval holder has continued to work on establishing a Heritage Agreement with the SA Native Vegetation Branch within DEW. A proposed variation to EPBC 2021/8958 is currently underway with the Department that includes an extension of the timeframe to establish the legal securing mechanism for the INTG TEC offset site (Appendix H). Despite the establishment of the above INTG TEC offset site Agreement, this will ensure that the INTG TEC offset site is protected under a Heritage Agreement within the timeframe specified in the approval condition.
<i>Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan</i> 9. To monitor and better understand the potential long-term impacts to the Pygmy Blue-tongue Lizard resulting from wind turbine noise, vibration and shadow flickering, the approval holder must submit to the Department for the Minister's approval a Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan (PBTL Research Plan) within 12 months of the date of this approval. The PBTL Research Plan must: - Be prepared by a suitably qualified researcher. - Be designed, primarily, to generate and analyse a decade of data to improve the understanding of the long-term impacts of wind turbine noise, vibration and shadow flickering on Pygmy Blue-tongue Lizard. - Clearly specify research objectives and methodologies.	Possible partial non-compliance with submission timeframe. However compliant with other aspects of this condition. Variation in progress.	Note that the timeframe applicable to this compliance report is 7 July 2025 to 6 July 2026. However, information prior to this timeframe is also provided for context. The approval holder did not submit a <i>Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan</i> within 12 months of the date of the approval (i.e., by 5 July 2023), as the approval holder was still preparing the <i>Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan</i> (also referred to as the PBTL Research Plan) with a suitably qualified researcher at the time. However, on 5 July 2023 (prior to the timeframe of this compliance report) the approval holder sought an extension to the timeframe associated with this condition of approval. Refer to Appendix J for correspondence regarding the request for an extension to the timeframe specified in this condition. All of this occurred prior to the timeframe of this annual compliance report (7 July 2025 to 6 July 2026). The approval holder did not receive a formal response from the Department, prior to submitting the PBTL Research Plan to the Department for Minister's approval on 11 December 2023. After receiving feedback from the Department, the approval holder submitted a revised and final version of the PBTL Research Plan to the Department for the Minister's approval on 29 January 2024.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
d. Specify timelines and/or milestones for delivery of findings, reports and scientific paper publication. e. Incorporate contemporary experimental design and methodologies including, but not limited to, those applied by the PBTL Recovery Team. f. Contain detailed costings and a commitment by the approval holder to fully fund at least 87 percent of the total cost of implementation of the PBTL Research Plan for at least 11 years. The approval holder must not commission unless the PBTL Research Plan has been approved by the Minister in writing.		Minister's approval of the PBTL Research Plan was provided on 20 February 2024 (refer to Appendix K for details). It is possible that the approval holder may be non-compliant with this condition of approval, as the PBTL Research Plan was not submitted to the Department within 12 months of the date of the approval. However, as outlined above, an extension to the timeframe for submission was sought and the approval holder submitted the PBTL Research Plan, which was approved by the Minister on 20 February 2024. The PBTL Research Plan was specifically prepared to satisfy the requirements of this condition of approval: • It was prepared by a suitably qualified researcher (condition 9. a). • It is designed, primarily, to generate and analyse a decade of data to improve understanding of the long-term impacts of wind turbine noise, vibration and shadow flickering on PBTL (condition 9. b). • It clearly specifies research objectives and methodologies (condition 9. c). • It specifies timelines and/or milestones for delivery of findings, reports and scientific paper publication (condition 9. d). • It incorporates contemporary experimental design and methodologies. Note that the PBTL Recovery Team does not undertake research or experiments on PBTL. The group is focused on coordinating on-ground activities associated with PBTL that different organisations and agencies are undertaking. To date, all research and experimental design developed for the PBTL Research Pan has been undertaken by Flinders University staff and students, while SA Museum had involvement previously (when Dr Mark Hutchinson (now retired) was the Curator of Reptiles). The experimental design and methodologies within the PBTL Research Plan were developed by Prof Mike Gardner (Flinders University; and

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		Chair of PBTL Recovery Team) and Dr Travis How (Umwelt; and member of PBTL Recovery Team) (condition 9. e). It contains detailed costings and a commitment by the approval holder to fully fund the total cost of implementation of the PBTL Research Plan for at least 11 years (with at least 87 % of the total cost funded by Stage 1A) (condition 9. f). The approval holder did not commission until 4 April 2024, which is after the PBTL Research Plan had been approved by the Minister (on 20 February 2024). As the approval holder will need to revise the PBTL Research Plan (see explanation in the following condition) a proposed variation to EPBC 2021/8958 is currently underway with the Department, which would extend the timeframe required for finalisation of the PBTL Research Plan, and commencement of the research activities (Appendix L).
10. In relation to the PBTL Research Plan required under condition 9, the approval holder must provide to the Department: a. Signed contracts exchanged between a suitably qualified researcher and the approval holder committing both parties to implement the PBTL Research Plan within 24 months of the date of this approval.	Non-compliant. Variation in progress.	EPBC 2021/8958 was approved on 5 July 2022. An extract of the signed contract exchanged between a suitably qualified researcher (Flinders University) and the approval holder committing both parties to implement the PBTL Research Plan is provided in Appendix M. A full copy of the signed contract was provided to the Department separately (due to confidentiality requirements) on 14 April 2025. The approval holder is aware that the full copy of the signed contract was provided to the Department after the 24-month timeframe, which does not comply with this condition of approval. As such notification of non-compliance for the late submission of the signed contract was submitted to the Department on 24 September 2025 (Appendix N). However, since the PBTL Research Plan was initially prepared and approved by the Minister, the approval holder has not been able to secure access to the proposed land for completion of the research activities for the required timeframe. The approval holder advised the Department of

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		this, and this was discussed with the Department on 30 January 2025, 14 April 2025 and 6 May 2025. As such, the approval holder has investigated alternative options for the location of the research and negotiated with the landholders. The approval holder has conducted surveys at various locations throughout the Goyder South Wind Farm to identify if there are any other locations that are suitable for conducting the research over the required timeframe. Specifically, conducting visits to WTGs SG044, SG027, SG029, SG033, SG032, B008, SG037 and SG036. Additionally, there were various surveys conducted in the area adjacent to the Substation. However, it was deemed that most of these locations would not be suitable for the purposes of achieving the research objectives of the approved PBTL Research Plan. However, it was identified that a smaller scope of research could be conducted at SG044. Flinders University has undertaken research at GSWF WTG SG044 and has also commenced preliminary surveys at the site of the proposed Goyder North Wind Farm to identify suitable sites, including suitable (proposed) wind turbine sites as well as control sites, that will be used to undertake research at. Flinders University have also recruited an honours student to complete the scope of research. A report on the smaller scope of research undertaken at GSWF WTG SG044 as part of the PBTL Research Plan is provided in Appendix O. Consequently, the approval holder will need to revise the PBTL Research Plan and if required, the approval holder will submit a revised plan to the Department for Minister's approval, in accordance with the requirements of the approval conditions. A proposed variation to EPBC 2021/8958 is currently underway with the Department, which extends the timeframe required for finalisation of the PBTL Research Plan, and commencement of the research activities. This proposed variation also extends the timeframes for submission of the

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		preliminary assessment report and final assessment report (condition c. and d. below) (Appendix L).
b. Reports describing the work undertaken as part of the PBTL Research Plan in each compliance report until the final assessment report of the findings of the PBTL Research Plan has been published.	Compliant.	A report on the smaller scope of research undertaken at GSWF WTG SG044 as part of the PBTL Research Plan is provided in Appendix O .
c. A detailed preliminary assessment report of the findings of the PBTL Research Plan within 90 months of the date of this approval.	Not applicable.	The approval holder intends to provide to the Department a detailed preliminary assessment report of the findings of the PBTL Research Plan within 90 months of the date of this approval (5 July 2022), which equates to 4 January 2030 – or, if the PBTL Research Plan is revised as outlined above, then this timeframe may be adjusted. However, as the 90 months from the date of approval timeframe does not occur until 4 January 2030, this condition is not applicable to the timeframe of this annual compliance report (7 July 2025 to 6 July 2026).
d. A final assessment report of the findings of the PBTL Research Plan within 13 years of the date of this approval and submit the findings of the PBTL Research Plan for publication in a relevant, reputable, peer-reviewed scientific journal.	Not applicable.	The approval holder intends to provide to the Department a final assessment report of the findings of the PBTL Research Plan within 13 years of the date of this approval (5 July 2022), which equates to 4 July 2035 – or, if the PBTL Research Plan is revised as outlined above, then this timeframe may be adjusted. The approval holder intends to submit the findings of the PBTL Research Plan for publication in a relevant, reputable, peer-reviewed scientific journal. However, as the 13 years from the date of approval timeframe does not occur until 4 July 2035, this condition is not applicable to the timeframe of this annual compliance report (7 July 2025 to 6 July 2026).

Table 2.2 Part B – Standard Administrative Conditions Associated with the Stage 1A EPBC Approval (2021/8958)

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
Notification of date of commencement of the action 11. The approval holder must notify the Department in writing of the date of commencement of the action and the date of commissioning within 10 business days after the date of commencement of the action and after the date of commissioning .	Compliant.	NEOEN (on behalf of the approval holder) notified the Department in writing on 6 July 2022 of the date of commencement of the action , 1 business day prior to the date of commencement of the action (7 July 2022). Evidence of notification was provided in previous annual compliance reports. NEOEN (on behalf of the approval holder) notified the Department in writing on 8 April 2024 of the date of commencement of commissioning (4 April 2024), 2 business days after the date of commissioning (4 April 2024) (refer to Appendix E for details).
12. If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister .	Not applicable.	Commencement of the action occurred on 7 July 2022. As commencement of the action occurred within 5 years from the date of the approval (5 July 2022), this condition is not applicable.
Compliance records 13. The approval holder must maintain accurate and complete compliance records .	Compliant.	The approval holder is maintaining accurate and complete compliance records .
14. If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request. Note: Compliance records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act , and or used to verify compliance with the conditions. Summaries of the result of an audit may	Not applicable.	The Department has not made a request in writing for electronic copies of compliance records within the timeframe applicable to this annual compliance report (7 July 2025 to 6 July 2026). As such, this condition is not applicable to this annual compliance report.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
be published on the Department's website or through the general media.		
Submission and publication of plans 15. The approval holder must: a. Submit plans electronically to the Department for approval by the Minister.	Compliant.	The Construction Environmental Management Plan (CEMP), PBTL Management Plan, and INTG TEC Management Plan were submitted electronically to the Department as part of the Preliminary Documentation during the EPBC referral assessment process. The PBTL OMP and INTG TEC OMP were also submitted electronically to the Department for approval by the Minister (refer to evidence / commentary with condition 6 for details). The BAMP and PBTL Research Plan were also submitted electronically to the Department for approval by the Minister (refer to evidence / commentary with condition 5 and condition 9, respectively).
b. Unless otherwise agreed to in writing by the Minister, publish each plan on the website within 20 business days of the date: i. of this approval decision if the version of the plan to be implemented is specified in these conditions; ii. the plan is approved by the Minister if these conditions require that the plan be approved by the Minister; or iii. the plan is approved by a responsible State minister of State authority if the plan is required as part of the SA development approval; iv. a revised action management plan is submitted to the Minister or the	Compliant.	The CEMP is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2023/01/GSWF-ELECNOR-EHS-PLN-0005-Rev-13-Construction-Environmental-Management-Plan.pdf. The PBTL Management Plan is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2024/02/PBTL_Man_Plan_Final_20231130_Redacted_20240207_opt.pdf. The INTG TEC Management Plan is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2023/01/INTG_TEC_Man_Plan_Final_20220628.pdf. The PBTL OMP is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2024/02/EX220805_PBTL_OMP_v5_20230929_Redacted_20240214_opt.pdf. The INTG TEC OMP is available on the Project's website at:

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
Department if the plan is submitted in accordance with condition 23;		https://goyderenergy.com.au/wp-content/uploads/2024/02/INTG-TEC-OMP_v5_20230929-final.pdf . The BAMP is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2024/03/EX220806-BAMP-Final-v5-20240125_signed_compressed.pdf . The PBTL Research Plan is available on the Project's website at: https://goyderenergy.com.au/wp-content/uploads/2024/03/PBTL-Research-Plan_Goyder-Wind-Farm_Final_20240125_Redacted.pdf .
c. Exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public.	Compliant.	Sensitive ecological data has been excluded / redacted from plans published on the website or provided to a member of the public.
d. Keep plans published on the website until the end date of this approval.	Compliant.	The approval holder intends to keep these plans published on the Project's website until the end date of the EPBC approval.
16. The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under a plan is prepared in accordance with the <i>Guidelines for biological survey and mapped data</i> , Commonwealth of Australia (2018), and submitted electronically to the Department in accordance with the requirements of the plan .	Compliant.	Monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under a plan (such as the PBTL OMP, INTG TEC OMP and BAMP) has been prepared in accordance with the <i>Guidelines for biological survey and mapped data</i> , Commonwealth of Australia (2018), and submitted to the Department in accordance with the requirements of each plan. As stated previously, the <i>Goyder South Hybrid Renewable Energy Facility – Stage 1: Stage 1A and Stage 1B Bird Adaptive Management Plan Annual Implementation Report 2025</i> has been submitted to the Department with this Annual Compliance Report.
Annual compliance reporting 17. The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action , or otherwise in accordance with an	Compliant.	The action commenced on 7 July 2022. This document is the fourth annual compliance report for Stage 1A and covers the fourth 12 month period following the date of commencement of the action , from 7 July 2025 to 6 July 2026.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
annual date that has been agreed to in writing by the Minister . The approval holder must:		
a. Publish each compliance report on the website within 60 business days following the relevant 12 month period.	Compliant.	The previous annual compliance report (7 July 2024 to 6 July 2025) was published on the Project's website on 26 September 2025, within 60 business days following the relevant 12 month period (7 July 2024 to 6 July 2025). This annual compliance report will be published on the Project's website within 60 business days following the fourth 12 month period, which equates to 28 September 2026. This annual compliance report will be available on the Project's website page at: https://goyderenergy.com.au/documents/.
b. Notify the Department by email that a compliance report has been published on the website and provide the weblink for the compliance report within 5 business days of the date of publication.	Compliant.	NEOEN notified the Department by email on 29 September 2025, that the previous compliance report (7 July 2024 to 6 July 2025) was published on the Project's website on 26 September 2025 and provided a weblink for the compliance report, which was within 5 business days of the date of publication (Appendix P). NEOEN will notify the Department by email that this compliance report has been published on the Project's website and provide the weblink for the compliance report within 5 business days of the date of publication (which equates to 4 October 2026, or earlier).
c. Keep all compliance reports publicly available on the website until this approval expires.	Compliant.	The three previous compliance reports are publicly available on the Project's website page at: https://goyderenergy.com.au/documents/. NEOEN will keep all compliance reports publicly available on the Project's website until the EPBC Act approval expires, which is 31 December 2057.
d. Exclude or redact sensitive ecological data from compliance reports published on the website.	Compliant.	Sensitive ecological data has been and will continue to be excluded or redacted from compliance reports published on the Project's website .

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
e. Where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.	Compliant.	Neoen submitted a full (non-redacted) version of the previous compliance report (for 7 July 2024 to 6 July 2025) containing sensitive ecological data , to the Department on 29 September 2025, which was within 5 business days of publication (Appendix P). The full version of this compliance report (for 7 July 2025 to 6 July 2026) containing sensitive ecological data will be submitted to the Department within 5 business days of publication (which equates to 4 October 2026 , or earlier).
Note: Compliance reports may be published on the Department's website.	Compliant.	Noted.
Reporting non-compliance 18. The approval holder must notify the Department in writing of any: incident ; non-compliance with the conditions; or non-compliance with the commitments made in plans . The notification must be given as soon as practicable, and no later than 2 business days after becoming aware of the incident or non-compliance. The notification must specify: a. Any condition which is or may be in breach. b. A short description of the incident and/or non-compliance. c. The location (including co-ordinates), date, and time of the incident and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.	Compliant.	The approval holder notified the Department in writing on 24 September 2025 of a non-compliance with condition 8 (Appendix G). The approval holder also notified the Department on 24 September 2025 of a non-compliance with condition 10 (Appendix N). Each notification was prepared to comply with the requirements of this condition. No other incident ; non-compliance with the conditions; or non-compliance with the commitments made in plans has been identified by the approval holder within the timeframe of this compliance report (7 July 2025 to 6 July 2026).

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
19. The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying: a. Any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future. b. The potential impacts of the incident or non-compliance. c. The method and timing of any remedial action that will be undertaken by the approval holder.	Compliant.	The approval holder provided details of the non-compliance with condition 8 to the Department with the notification on 24 September 2025 (Appendix G). The approval holder provided details of the non-compliance with condition 10 to the Department with the notification on 24 September 2025 (Appendix N). Each included details of the non-compliance with the conditions, the investigation undertaken, the potential impacts of the non-compliance, and corrective action that will be undertaken.
Independent audit 20. The approval holder must ensure that independent audits of compliance with the conditions are conducted as requested in writing by the Minister.	Not applicable.	No independent audit of compliance with the conditions has been requested in writing by the Minister .

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
21. For each independent audit, the approval holder must: a. Provide the name and qualifications of the independent auditor and the draft audit criteria to the Department. b. Only commence the independent audit once the audit criteria have been approved in writing by the Department. c. Submit an audit report to the Department within the timeframe specified in the approved audit criteria.	Not applicable.	Not applicable for this annual compliance report .
22. The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.	Not applicable.	Not applicable for this annual compliance report .
Revision of action management plans 23. The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.	Not applicable.	This document is the fourth annual compliance report for Stage 1A and covers the fourth 12 month period following the date of commencement of the action, from 7 July 2025 to 6 July 2026. The approval holder submitted a revised version of the PBTL Research Plan to the Department on 1 April 2025 (before the timeframe of this annual compliance report). However, following discussion with the Department on the revised PBTL Research Plan, and the recommendation from the Department to withdraw the revised Plan, it was withdrawn on 15 April 2025 (before the timeframe of this annual compliance report). As such, this condition is considered to be not applicable.

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
		As mentioned previously, there is a proposed variation underway with the Department to extend the timeframe for finalisation of the PBTB Research Plan.
24. The approval holder may choose to revise an action management plan approved by the Minister under conditions 3 and 4, or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act , if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact .	Not applicable.	This document is the fourth annual compliance report for Stage 1A and covers the fourth 12 month period following the date of commencement of the action, from 7 July 2025 to 6 July 2026. The approval holder has not revised an action management plan approved by the Minister , under conditions 3 and 4, or as subsequently revised in accordance with these conditions. As such, this condition of approval is not applicable.
25. If the approval holder makes the choice under condition 24 to revise an action management plan without submitting it for approval, the approval holder must: a. Notify the Department in writing that the approved action management plan has been revised and provide the Department with: i. An electronic copy of the RAMP; ii. An electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP. iii. An explanation of the differences between the approved action management plan and the RAMP.	Not applicable.	The approval holder has not made the choice under condition 24 to revise an action management plan without submitting it for approval. As such, this condition is not applicable for this annual compliance report .

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
iv. The reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a new or increased impact. v. Written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the Department. b. Subject to condition 27, implement the RAMP from the RAMP implementation date.		
26. The approval holder may revoke their choice to implement a RAMP under condition 24 at any time by giving written notice to the Department. If the approval holder revokes the choice under condition 24, the approval holder must implement the action management plan in force immediately prior to the revision undertaken under condition 24.	Not applicable.	Not applicable for this annual compliance report .
27. If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the RAMP would be likely to have a new or increased impact, then:	Not applicable.	Not applicable for this annual compliance report .

Condition of approval	Is the project compliant with this condition?	Evidence / Commentary
a. Condition 24 does not apply, or ceases to apply, in relation to the RAMP. b. The approval holder must implement the action management plan specified by the Minister in the notice.		
28. At the time of giving the notice under condition 27, the Minister may also notify that for a specified period of time, condition 24 does not apply for one or more specified action management plans.	Not applicable.	Not applicable for this annual compliance report .
Note: conditions 24, 25, 26 and 27 are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised action management plan, at any time, to the Minister for approval.		Noted.
Completion of the action 29. Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.	Not applicable.	The action has not yet been completed, so this condition of approval is not applicable for this annual compliance report .

Appendix A

EPBC Act Approval Documentation (EPBC 2021/8958)



Australian Government
**Department of Climate Change, Energy,
the Environment and Water**

APPROVAL

Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10km south Burra SA (EPBC 2021/8958)

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (the EPBC Act). Note that section 134(1A) of the EPBC Act applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

Person to whom the approval is granted (approval holder)	Goyder Wind Farm 1 Pty Ltd
ACN of approval holder	643 229 869
Action	To construct and operate up to 38 wind turbine generators and associated infrastructure as part of the Goyder South Hybrid Renewable Energy Facility, approximately 10 km south of Burra, South Australia [See EPBC Act referral 2021/8958].

Approval decision

My decisions on whether or not to approve the taking of the action for the purposes of each controlling provision for the action are as follows.

Controlling Provisions

Listed Threatened Species and Communities	
Section 18	Approve
Section 18A	Approve
Listed migratory species	
Section 20	Approve
Section 20A	Approve

Period for which the approval has effect

This approval has effect until 31 December 2057.

Decision-maker

Name and position	Kylie Calhoun Assistant Secretary Environment Assessments West (WA, SA, NT) Branch
Signature	
Date of decision	5 July 2022

Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

Construction/clearance limits

1. To minimise **impacts** to **protected matters**, the approval holder must not:
 - a. **construct** more than 38 wind turbine generators within the **project area**;
 - b. **clear** outside the **project area**;
 - c. **clear** more than 8.04 ha of **Pygmy Blue-tongue Lizard habitat** within the **project area**;
 - d. **clear** more than 18 individual plants of **Trailing Hop-bush** within the **project area**; and
 - e. **clear** more than 12.67 ha of the **Iron-grass Natural Temperate Grassland of South Australia TEC** within the **project area**.

Environmental management plans

2. To minimise **impacts** to **protected matters** during the **construction** and **operation** of the wind farm, the approval holder must implement the Construction Environmental Management Plan (CEMP) as required under condition 9 of the **SA development approval**.
3. For the protection of the **Pygmy Blue-tongue Lizard**, the approval holder must implement the **PBTL Management Plan** for the duration of this approval.
4. For the protection of the **Iron-grass Natural Temperate Grassland of South Australia TEC**, the approval holder must implement the **INTG TEC Management Plan** for the duration of this approval.

Bird Adaptive Management Plan

5. The approval holder must submit to the **Department** for the **Minister's** approval a Bird Adaptive Management Plan (BAMP) within 12 months of the date of this approval. The environmental objectives of the BAMP are to effectively monitor for any **impacts to listed bird species** during the **operation** of the wind farm from (but not limited to) wind turbine strikes and, if any **impacts** are detected, to implement the technology, measures and procedures necessary to ensure that the **impacts** are accurately measured, reported and remain insignificant.

The BAMP must:

- a. be consistent with the **Environmental Management Plan Guidelines**;
- b. specify relevant **protected matters**, and reference to the **EPBC Act** approval conditions to which the BAMP refers;
- c. include a table of commitments to achieve the BAMP's environmental objectives and a reference to where the commitments are detailed in the BAMP;
- d. include an assessment of risks to achieving the BAMP's environmental objectives and risk management strategies that will be applied;
- e. include a post-**commissioning** long-term wind turbine generator collision monitoring program to detect and manage potential **impacts to listed bird species** as a result of collision, which must:
 - i. contain details of the nature, timing and frequency of monitoring to inform progress against achieving the environmental outcomes and be sufficient to determine whether the BAMP is likely to achieve those environmental outcomes in adequate time to implement all necessary corrective actions;

- ii. include the findings of exhaustive pre-**commissioning** scavenger activity and searcher efficiency trials;
 - iii. demonstrate how site-specific and species-specific risks and uncertainties (for example, findings of the pre-**commissioning** scavenger activity and searcher efficiency trials) have informed the design of the monitoring program; and
 - iv. contain commitments to DNA test carcasses that cannot be otherwise identified by a **suitably qualified bird expert**, to undertake further periodic carcass persistence and searcher efficiency trials to check if assumptions need revision, to maximise turbine collision detection in a timely manner, and to maximise carcass detection in a timely manner.
- f. include reporting commitments and timeframes for the provision of site-specific and species-specific information, which must:
- i. contain annual turbine strike reports comprising raw data and strike notifications, survey methodologies, results of detection/persistence trials, environmental/meteorological conditions, and associated statistical analysis; and
 - ii. contain estimation of annual mortality rate for each **listed bird species** comprising supporting evidence from case studies of **listed bird species** carcass size classes, results of persistence trials and searcher efficiency trials, annual probability of detection and monthly strike monitoring, and collision monitoring protocol and survey effort; and
 - iii. contain species occurrence records prepared in accordance with **Guidelines for Biological Survey and Mapped Data**.
- g. include an adaptative management framework designed to:
- i. ensure that no **significant impacts** to **listed bird species** are likely to occur as a result of the action;
 - ii. clearly demonstrate the linkages between environmental outcomes, implementation and management measures, monitoring, reporting and investigations, and implementation of corrective actions to ensure the environmental outcomes will be achieved;
 - iii. incorporate site-specific data collected through ongoing monitoring activities, and to take into account changes to turbine risk ratings;
 - iv. propose corrective actions if triggers are reached, such as bird and insect deterrents, low wind speed curtailments, wind turbine generator temporary or permanent shutdown, and/or permanent decommissioning of specific wind turbine generators; and
- h. commit that, if **significant impacts** to **listed bird species** occur, or are likely to have occurred, as a result of the action, the approval holder will, within 3 months of becoming aware of any actual or likely **significant impact**, submit to the **Department** for the approval of the **Minister** a revised BAMP responding to, and accompanied by, an evaluation prepared by a **suitably qualified bird expert** of the effectiveness of the BAMP in preventing **significant impacts** to **listed bird species**.

The approval holder must not **commission** unless the BAMP has been approved by the **Minister** in writing. The approval holder must commence implementing the approved BAMP before **commissioning** and continue implementing the approved BAMP until the **completion of the action**.

Environmental offsets

Offset Management Plan

6. To compensate for residual **significant impacts** to the **Pygmy Blue-tongue lizard** and the **Iron-grass Natural Temperate Grassland of South Australia** TEC, the approval holder must submit to

the **Department** for the **Minister's** approval an Offset Management Plan (OMP) within 6 months of the date of this approval.

The OMP must:

- a. be consistent with the **Environmental Management Plan Guidelines**;
- b. include a reference to the **EPBC Act** approval conditions to which the OMP refers;
- c. include summary information on the residual **significant impacts** to the **Pygmy Blue-tongue Lizard** and the **Iron-grass Natural Temperate Grassland of South Australia TEC** that will be compensated for by the offset(s);
- d. identify a suitable environmental offset(s) to compensate for residual **significant impacts** to the **Pygmy Blue-tongue lizard** and the **Iron-grass Natural Temperate Grassland of South Australia TEC** that meets the requirements of the **Environmental Offsets Policy** to the satisfaction of the **Minister**;
- e. include detailed baseline habitat quality information on the proposed offset(s);
- f. commit to achievable ecological benefits and provide timeframes for their achievement;
- g. detail how the offset(s) will be protected, and ecological benefits maintained;
- h. describe the monitoring program(s) to be implemented that will determine progress towards attainment of and maintenance of the ecological benefits at the proposed offset(s), which must include:
 - i. measurable performance indicators to monitor attainment of the ecological benefits;
 - ii. trigger values for corrective actions; and
 - iii. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators.
- i. include an assessment of risks to achieving the ecological benefit(s) and what risk management strategies will be applied to address these;
- j. specify how and at what frequency offset(s) management results, monitoring program findings and assessments of ecological benefits will be reported to the **Department** and the public;
- k. propose corrective actions to ensure ecological benefits are attained or maintained, if trigger values are reached or performance indicators not attained;
- l. include links to referenced **plans** and applicable conditions of approval (including State approval conditions), if any; and
- m. specify and justify the period for which the OMP will be implemented.

The approval holder must not commence **commissioning** until the OMP has been approved by the **Minister** in writing. The approval holder must implement the approved OMP for the period specified in the approved OMP.

7. If the OMP (required under Condition 6) has not been approved by the **Minister** in writing within 18 months of the date of this approval, and the **Minister** notifies the approval holder that the submitted OMP is not suitable for approval, the **Minister** may, at least 2 months after so notifying the approval holder, approve a version of the OMP revised by the **Department**.
8. The approval holder must provide written evidence to the **Department** that the offset site(s) required under the approved OMP has/have been acquired and secured within 12 months of the OMP approval date. The written evidence must identify the **legal securing mechanism** by which each offset site will be permanently protected for conservation.

Note: The approval holder may choose to submit separate Offset Management Plans (OMPs) for the **Pygmy Blue-tongue Lizard** and the **Iron-grass Natural Temperate Grassland of South Australia TEC** instead of a single OMP.

Note: The approval holder may choose to combine the OMPs required as conditions of approval for other proposed elements of the **Goyder South Hybrid Renewable Energy Facility** for the same **protected matters**. In this case, the approval holder must clearly demonstrate how the offset requirement(s) for each individual proposed element is being met and identify unique offset area(s) for each approved action geospatially.

Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan

9. To monitor and better understand the potential long-term **impacts** to the **Pygmy Blue-tongue Lizard** resulting from wind turbine noise, vibration and shadow flickering, the approval holder must submit to the **Department** for the **Minister's** approval a Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan (PBTB Research Plan) within 12 months of the date of this approval.

The PBTB Research Plan must:

- a. be prepared by a **suitably qualified researcher**;
- b. be designed, primarily, to generate and analyse a decade of data to improve the understanding of the long-term **impacts** of wind turbine noise, vibration and shadow flickering on **Pygmy Blue-tongue Lizard**;
- c. clearly specify research objectives and methodologies;
- d. specify timelines and/or milestones for delivery of findings, reports and scientific paper publication;
- e. incorporate contemporary experimental design and methodologies including, but not limited to, those applied by the **PBTB Recovery Team**; and
- f. contain detailed costings and a commitment by the approval holder to fully fund at least 87 percent of the total cost of implementation of the PBTB Research Plan for at least 11 years.

The approval holder must not **commission** unless the PBTB Research Plan has been approved by the **Minister** in writing.

10. In relation to the PBTB Research Plan required under condition 9, the approval holder must provide to the **Department**:
 - a. signed contracts exchanged between a **suitably qualified researcher** and the approval holder committing both parties to implement the PBTB Research Plan within 24 months of the date of this approval;
 - b. reports describing the work undertaken as part of the PBTB Research Plan in each **compliance report** until the final assessment report of the findings of the PBTB Research Plan has been published;
 - c. a detailed preliminary assessment report of the findings of the PBTB Research Plan within 90 months of the date of this approval; and
 - d. a final assessment report of the findings of the PBTB Research Plan within 13 years of the date of this approval,and submit the findings of the PBTB Research Plan for publication in a relevant, reputable, peer-reviewed scientific journal.

Part B – Standard administrative conditions

Notification of date of commencement of the action

11. The approval holder must notify the **Department** in writing of the date of **commencement of the action** and the date of **commissioning** within 10 **business days** after the date of **commencement of the action** and after the date of **commissioning**.
12. If the **commencement of the action** does not occur within 5 years from the date of this approval, then the approval holder must not **commence the action** without the prior written agreement of the **Minister**.

Compliance records

13. The approval holder must maintain accurate and complete **compliance records**.
14. If the **Department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

Note: **Compliance records** may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department's** website or through the general media.

Submission and publication of plans

15. The approval holder must:
 - a. submit **plans** electronically to the **Department** for approval by the **Minister**;
 - b. unless otherwise agreed to in writing by the **Minister**, publish each **plan** on the **website** within 20 **business days** of the date:
 - i. of this approval decision if the version of the **plan** to be implemented is specified in these conditions;
 - ii. the **plan** is approved by the **Minister** if these conditions require that the **plan** be approved by the **Minister**; or
 - iii. the **plan** is approved by a responsible State minister of State authority if the **plan** is required as part of the **SA development approval**;
 - iv. a revised action management plan is submitted to the **Minister** or the **Department** if the **plan** is submitted in accordance with condition 23;
 - c. exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public; and
 - d. keep **plans** published on the **website** until the end date of this approval.
16. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under a **plan** is prepared in accordance with the *Guidelines for biological survey and mapped data*, Commonwealth of Australia (2018), and submitted electronically to the **Department** in accordance with the requirements of the **plan**.

Annual compliance reporting

17. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:
 - a. publish each **compliance report** on the **website** within 60 **business days** following the relevant 12 month period;
 - b. notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within 5 **business days** of the date of publication;
 - c. keep all **compliance reports** publicly available on the **website** until this approval expires;
 - d. exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**; and
 - e. where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

Note: **Compliance reports** may be published on the **Department's** website.

Reporting non-compliance

18. The approval holder must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable, and no later than 2 **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
 - a. any condition which is or may be in breach;
 - b. a short description of the **incident** and/or non-compliance; and
 - c. the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.
19. The approval holder must provide to the **Department** the details of any **incident** or non-compliance with the conditions or commitments made in **plans** as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
 - a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
 - b. the potential **impacts** of the **incident** or non-compliance; and
 - c. the method and timing of any remedial action that will be undertaken by the approval holder.

Independent audit

20. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.
21. For each **independent audit**, the approval holder must:
 - a. provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;
 - b. only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and
 - c. submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.
22. The approval holder must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

Revision of action management plans

23. The approval holder may, at any time, apply to the **Minister** for a variation to an action management plan approved by the **Minister** or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the **EPBC Act**. If the **Minister** approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.
24. The approval holder may choose to revise an action management plan approved by the **Minister** under conditions 3 and 4, or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the **EPBC Act**, if the taking of the action in accordance with the RAMP would not be likely to have a **new or increased impact**.
25. If the approval holder makes the choice under condition 24 to revise an action management plan without submitting it for approval, the approval holder must:
 - a. notify the **Department** in writing that the approved action management plan has been revised and provide the **Department** with:

- i. an electronic copy of the RAMP;
 - ii. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP;
 - iii. an explanation of the differences between the approved action management plan and the RAMP;
 - iv. the reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a **new or increased impact**; and
 - v. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 **business days** after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the **Department**.
- b. subject to condition 27, implement the RAMP from the RAMP implementation date.
26. The approval holder may revoke their choice to implement a RAMP under condition 24 at any time by giving written notice to the **Department**. If the approval holder revokes the choice under condition 24, the approval holder must implement the action management plan in force immediately prior to the revision undertaken under condition 24.
27. If the **Minister** gives a notice to the approval holder that the **Minister** is satisfied that the taking of the action in accordance with the RAMP would be likely to have a **new or increased impact**, then:
- a. condition 24 does not apply, or ceases to apply, in relation to the RAMP; and
 - b. the approval holder must implement the action management plan specified by the **Minister** in the notice.
28. At the time of giving the notice under condition 27, the **Minister** may also notify that for a specified period of time, condition 24 does not apply for one or more specified action management plans.

Note: conditions 24, 25, 26 and 27 are not intended to limit the operation of section 143A of the **EPBC Act** which allows the approval holder to submit a revised action management plan, at any time, to the **Minister** for approval.

Completion of the action

29. Within 30 days after the **completion of the action**, the approval holder must notify the **Department** in writing and provide **completion data**.

Part C – Definitions

In these conditions, except where contrary intention is expressed, the following definitions are used:

Business day means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

Clear/Clearing means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation.

Commencement of the action/Commence the action means the first instance of any specified activity associated with the action including **clearing** and **construction**. **Commencement of the action/Commence the action** does not include minor physical disturbance necessary to:

- i. undertake pre-clearance surveys or monitoring programs;
- ii. install signage and /or temporary fencing to prevent unapproved use of the project area;
- iii. protect environmental and property assets from fire, weeds and pests, including installation of temporary fencing, and use of existing surface access tracks;

- iv. install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no **impact** on the **protected matters**; or
- v. undertaking geotechnical investigations if it causes only minor physical disturbance and is required well in advance of most site works to inform design.

Commission/Commissioning means all activities, including turning of turbines, after the components of the first complete wind turbine are installed. The date on which **commission/commissioning** commences is the first date on which the blades of the first completed wind turbine start rotating.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met. The **Department's** preferred spatial data format is **shapefile**.

Completion of the action means the date on which all specified activities associated with the action have permanently ceased.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

Compliance report(s) means written reports:

- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
- ii. consistent with the *Annual Compliance Report Guidelines*, Commonwealth of Australia 2014;
- iii. include a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
- iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

Construct/Construction means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of temporary fences and signage.

Department means the Australian Government agency responsible for administering the **EPBC Act**.

Environmental Offsets Policy means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, Commonwealth of Australia 2012, or any subsequent official revision produced by the **Department**.

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Goyder South Hybrid Renewable Energy Facility is a renewable energy development located between Burra and Robertstown in the Mid North of South Australia, and represented by the area shown enclosed by the yellow line labelled 'Goyder south Hybrid Renewable Energy Facility' on the map at Attachment A. The **Goyder South Hybrid Renewable Energy Facility** includes, in addition to the action subject of this approval, the proposed actions described in the **EPBC Act** referrals 2021/8957, 2021/8959 and 2021/8960.

Impact (verb) means any event which has the potential to, or does, impact on one or more **protected matter**.

Incident means any event which has the potential to, or does, impact on one or more **protected matter**.

Independent audit means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines*, Commonwealth of Australia 2019.

Iron-grass Natural Temperate Grassland of South Australia TEC means the **EPBC Act** listed threatened ecological community (TEC) *Iron-grass Natural Temperate Grassland of South Australia*.

INTG TEC Management Plan means the *Goyder South Hybrid Renewable Energy Facility INTG TEC Management Plan* prepared by EBS Ecology for NEOEN Australia Pty Ltd (version 3 of 28 June 2022 or subsequent revisions thereof).

Listed bird species means all bird species listed under the **EPBC Act** as a listed threatened species or as a listed migratory species.

Monitoring data means the data required to be recorded under the conditions of this approval.

Minister means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

New or increased impact means a new or increased environmental impact or risk relating to any **protected matter**, when compared to the likely impact of implementing the action management plan that has been approved by the **Minister** under conditions 3 and 4, including any subsequent revisions approved by the **Minister**, as outlined in the *Guidance on 'new or increased impact' relating to changes to approved management plans under EPBC Act environmental approvals*, Commonwealth of Australia 2017.

Operation means all activities that occur after the components of the final wind turbine generator are installed.

Plan(s) means any of the documents required to be prepared, approved by the **Minister**, implemented by the approval holder and published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

Project area means the location of the action, represented by the area shown enclosed by the dashed magenta line labelled 'Wind Farm 1A' on the maps at Attachments A, B, C and D.

Protected matter(s) means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Pygmy Blue-tongue Lizard is the **EPBC Act** listed threatened species *Tiliqua adelaidensis*.

Pygmy Blue-tongue Lizard habitat means remnant native grassland or grassy woodland with a sparse overstorey of trees, represented in the map at Attachment C by the areas shown enclosed by the green line labelled as 'Pygmy Blue-tongue Lizard habitat'.

PBTL Management Plan means the *Goyder South Hybrid Renewable Energy Facility PBTL Management Plan* prepared by EBS Ecology for NEOEN Australia Pty Ltd (version 3 of 28 June 2022 or subsequent versions thereof).

PBTL Recovery Team means a collaboration of partners brought together by common objectives to develop and/or coordinate the implementation of a recovery plan, conservation advice or program for the **Pygmy Blue-tongue Lizard**.

SA development approval means the approved development application number 422/V009/20 R1 (or subsequent approved revisions thereof) granted under section 131 (19) of the *Planning, Development and Infrastructure Act 2016* (SA) for the **Goyder South Hybrid Renewable Energy Facility**.

Sensitive ecological data means data as defined in the *Sensitive Ecological Data – Access and Management Policy V1.0*, Commonwealth of Australia 2013.

Shapefile means location and attribute information of the action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

Significant impacts are **impacts** which are important, notable, or of consequence, having regard to their context or intensity, and assessed within the framework of the *Matters of National Environmental Significance – Significant Impact Guidelines 1.1*, Commonwealth of Australia 2013.

Suitably qualified bird expert means a person who has relevant professional qualifications and at least 3 years of work experience designing and implementing plans for the conservation management of birds, who can identify bird species, and who can give an authoritative assessment and advice practices to avoid and mitigate impacts on birds using relevant protocols, standards, methods and/or literature. If the person does not have appropriate professional qualifications, the person must have at least 10 years of work experience identifying bird species, and designing and implementing plans for the conservation management of birds.

Suitably qualified researcher means a person who has academic qualifications in ecology (or related subject areas) and training, skills and experience related to the nominated subject matter using the relevant protocols, standards, methods and/or literature, or a person who is studying to obtain academic qualifications related to the nominated subject matter (e.g., a university post-graduate student), provided they work under the supervision of a person who holds relevant academic qualifications and training, skills and substantial experience on the nominated subject matter.

Suitably qualified person means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

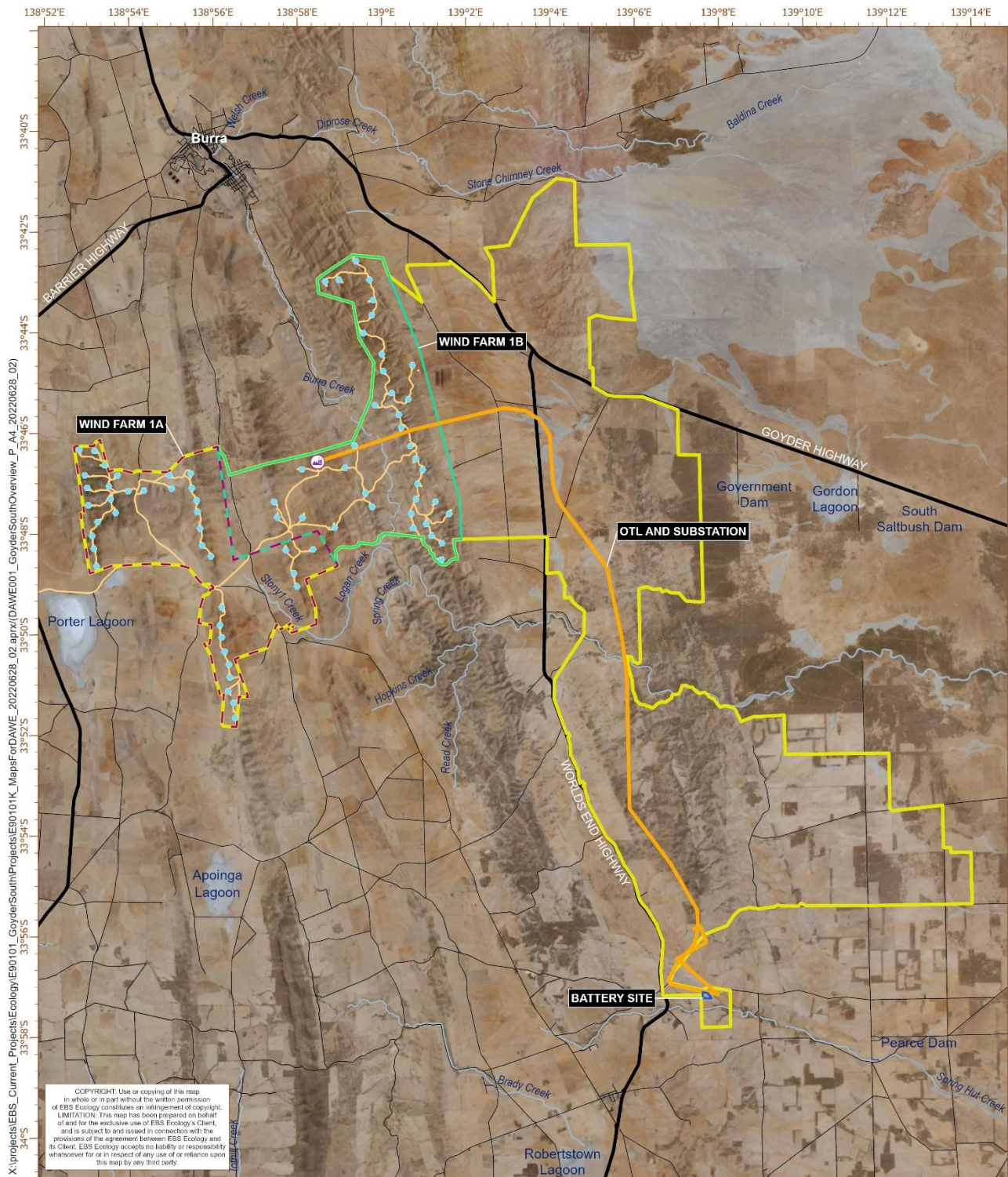
Trailing Hop-bush is the EPBC Act listed threatened species *Dodonaea procumbens*.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

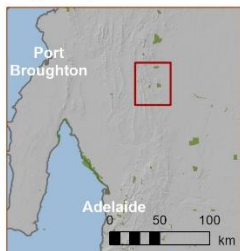
ATTACHMENTS

1. **Attachment A** – Location of Wind Farm 1A within the Goyder South Renewables Energy Facility.
2. **Attachment B** – Project area and Infrastructure footprint.
3. **Attachment C** – Pygmy Blue-tongue Lizard habitat.
4. **Attachment D** – Iron-grass Natural Temperate Grassland of South Australia TEC habitat.

Attachment A



Data Source: EBS Ecology: map production (2022), ESRI: ArcGIS pro, Satellite imagery (2022), DEW: Water course, Water body (2018), DIT: Main road, Local road (2018), GE: Goyder south Hybrid Renewable Energy Facility, Wind Farm 1A, Wind Farm 1B, OTL and Substation, Battery site, WTG, Access track, Substation west (2021)



Legend

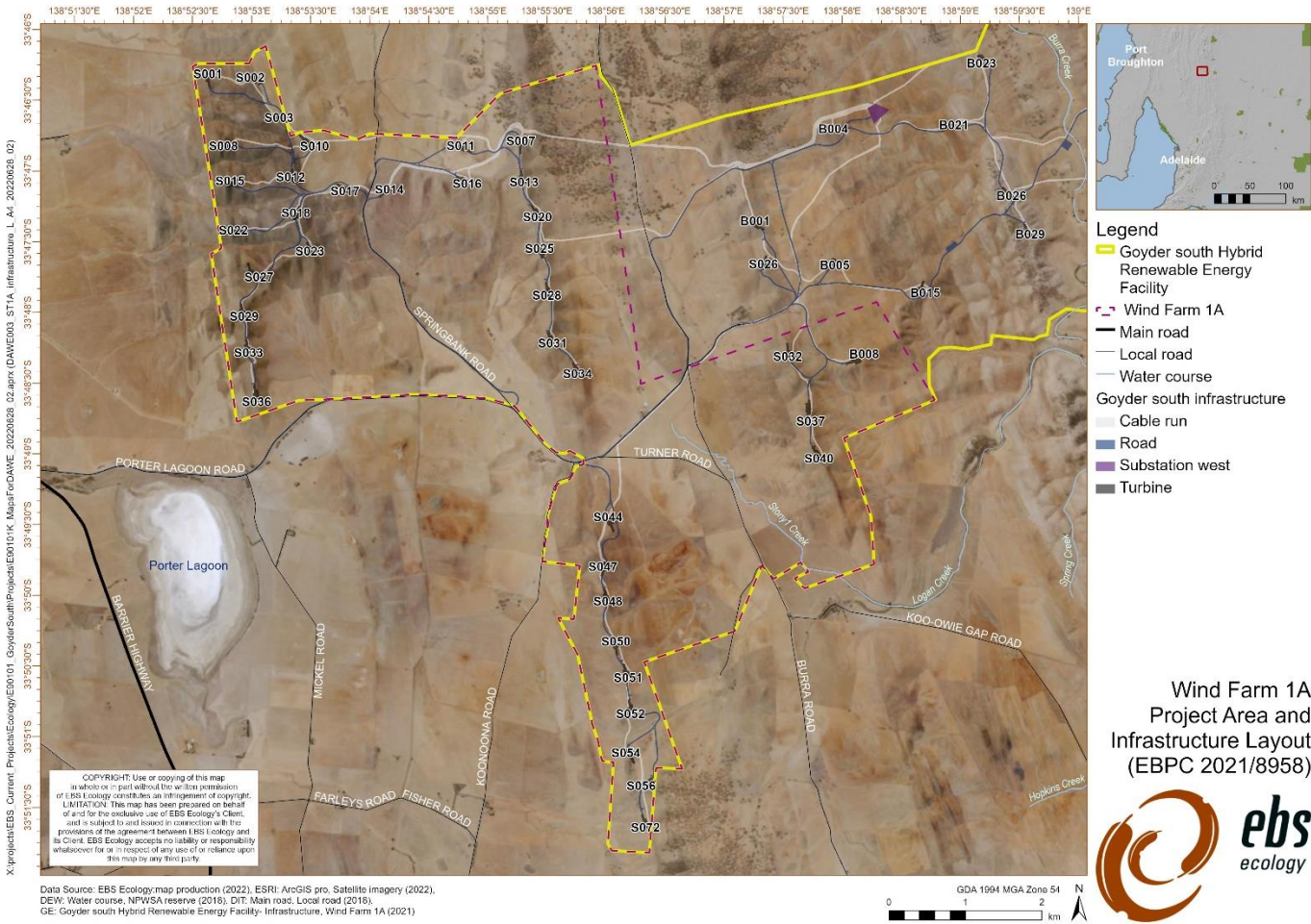
- | | |
|--|-----------------|
| Goyder south Hybrid Renewable Energy Facility | Substation west |
| Wind Farm 1A | Access track |
| Wind Farm 1B | Main road |
| OTL and Substation | Local road |
| Battery site | Water course |
| WTG | Water body |

0 5 10 km
GDA 1994 MGA Zone 54 N

Location of Wind Farm 1A within the Goyder South Hybrid Renewable Energy Facility (EPBC 2021/8958)



Attachment B



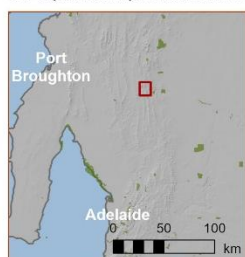
Attachment C



Attachment D



Data Source: EBS Ecology: INTG condition, INTG patch, map production (2022), ESRI: ArcGIS pro, Satellite imagery (2022),
DEW: Water course, Water body (2018), DIT: Main road, Local road (2018),
GE: Goyder south Hybrid Renewable Energy Facility, Wind Farm 1A, Infrastructure, (2021)



Legend

- Goyder south Hybrid Renewable Energy Facility
- Wind Farm 1A
- Main road
- Local road
- Water course
- INTG condition
- Class B
- Class C

- INTG patch
- 2. *Lomandra multiflora* ssp. *Dura* (Hard Mat-rush) / *Lomandra effusa* (Scented Mat-rush) Mixed Open Grassland
- Goyder south infrastructure
- Cable run
- Road
- Substation west
- Turbine

GDA 1994 MGA Zone 54
0 1 2 km

INTG TEC
(EPBC 2021/8958)



Appendix B

Maps of Stage 1A





Appendix B

Stage 1A with WTGs and other infrastructure; Trailing Hop-bush plants; PBTL habitat; INTG TEC patches; and impacted areas (refer to the following three figures for more detail)

- Goyder South - Stage 1A
- Goyder South Infrastructure
- Main road
- Local road
- Water course
- Water body
- Trailing Hop-bush (*Dodonaea procumbens*) EPBC: V

Iron-grass Natural Temperate Grassland TEC

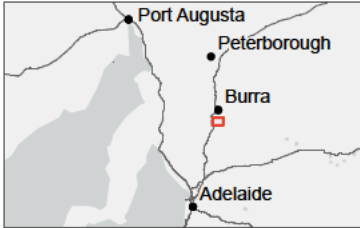
- Class B
- Cleared / impacted

PBTL Habitat (Post EPBC)

- Likely
- Cleared / impacted

PBTL Habitat (Pre EPBC)

- Likely
- Potential
- Cleared / impacted



0 1 2
Kilometres
Scale 1:60,000 at A4
GDA2020 MGA Zone 54

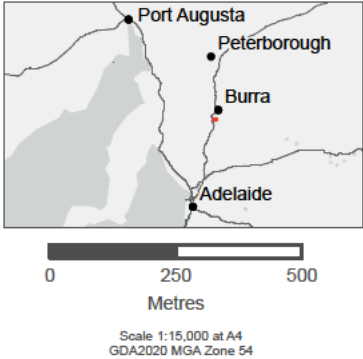
This document and the information are subject to Terms and Conditions and Umwelt (Australia) Pty Ltd ("Umwelt") Copyright in the drawings, information and data recorded ("the information") is the property of Umwelt. This document and the information are solely for the use of the authorized recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that which it was supplied by Umwelt. Umwelt makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.
APPROVED FOR AND ON BEHALF OF Umwelt



Appendix B

Zoom-in map 1 of 3 showing Trailing Hop-bush plants; PBTL habitat (Pre EPBC); impacted PBTL habitat (Post EPBC); impacted and Class B INTG TEC

- Goyder South - Stage 1A
- Goyder South Infrastructure
- Local road
- Water body
- Trailing Hop-bush (*Dodonaea procumbens*) EPBC: V
- Iron-grass Natural Temperate Grassland TEC
- Class B
- Cleared / impacted
- PBTL Habitat (Post EPBC)
- Likely
- Cleared / impacted
- PBTL Habitat (Pre EPBC)
- Potential



This document and the information are subject to Terms and Conditions and Umwelt (Australia) Pty Ltd ("Umwelt") Copyright in the drawings, information and data recorded ("the information") is the property of Umwelt. This document and the information are solely for the use of the authorized recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that which it was supplied by Umwelt. Umwelt makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

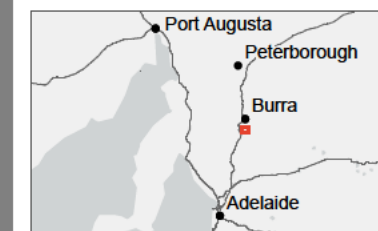
APPROVED FOR AND ON BEHALF OF Umwelt

Zoom-in map 2 of 3 showing Trailing Hopbush plants; impacted PBTL habitat (Pre EPBC); and impacted Class B INTG TEC

-  Goyder South - Stage 1A
 Goyder South Infrastructure
 Local road
 Water course
 Water body
 Trailing Hop-bush (*Dodonaea procumbens*) EPBC: V

Iron-grass Natural Temperate Grassland TEC

-  Class B
 Cleared / impacted
PBTL Habitat (Post EPBC)
 Likely
 Cleared / impacted
PBTL Habitat (Pre EPBC)
 Likely
 Potential
 Cleared / impacted



0 1 2
Kilometres

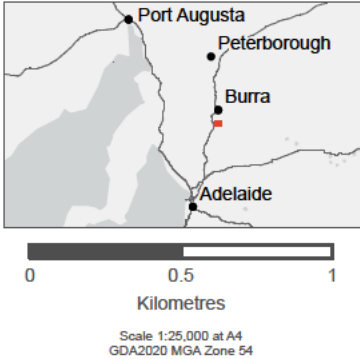
Scale 1:40,000 at A4
GDA2020 MGA Zone 54

This document and the information are subject to Terms and Conditions and Umwelt (Australia) Pty Ltd ("Umwelt") Copyright in the drawings, information and data recorded ("the information") is the property of Umwelt. This document and the information are solely for the use of the authorized recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that which it was supplied by Umwelt. Umwelt makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

Appendix B

Zoom-in map 3 of 3 showing impacted PBTL habitat (Pre EPBC); and impacted Class B INTG TEC

- Goyder South - Stage 1A
- Goyder South Infrastructure
- Local road
- Water course
- Water body
- Iron-grass Natural Temperate Grassland TEC
- Class B
- Cleared / impacted
- PBTL Habitat (Pre EPBC)
- Potential
- Cleared / impacted



This document and the information are subject to Terms and Conditions and Umwelt (Australia) Pty Ltd ("Umwelt") Copyright in the drawings, information and data recorded ("the information") is the property of Umwelt. This document and the information are solely for the use of the authorized recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that which it was supplied by Umwelt. Umwelt makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

APPROVED FOR AND ON BEHALF OF Umwelt

Appendix C

Submission of BAMP

From: Inès Béchameil <ines.bechameil@neoen.com>
Sent: Wednesday, 5 July 2023 3:06 PM
To: Dowd, Tony
Cc: Post Approval
Subject: Goyder South Hybrid Renewable Energy Facility - Bird Adaptative Management Plan
Attachments: BAMP_20230705.pdf

Dear Tony,

In respect of the Wind Farm 1A and Wind Farm 1B components of the Goyder south Hybrid Renewable Energy Facility, we as the approval holder, submit to the Department of Climate Change, Energy, the Environment and Water (the **Department**) a combined Bird Adaptative Management Plan (**BAMP**). This submission is made pursuant to:

- Condition 5 of the *Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10km south Burra SA* (EPBC 2021/8958), dated 5 July 2022;
- Condition 4 of the *Goyder South Hybrid Renewable Energy Facility – Wind Farm 1B, 5km south Burra SA* (EPBC 2021/8957), dated 13 July 2022; and

As the EPBC approval conditions state that the approval holder must not *commission* (refer to the definition in relevant approval conditions) until the BAMP has been approved by the Minister in writing, and the current Project schedule involves the commencement of commissioning of the first turbine for Wind Farm 1A in September 2023 and commencement of commissioning of the first turbine for Wind Farm 1B in April 2024, please note that Neoen is aiming for **approval of the BAMP by the end of August 2023**.

Could you please confirm receipt of this email and of the BAMP?

And could you please let us know whether you are available for a meeting within the next 2 weeks so we can present this BAMP and start discussing any comments or questions that DCCEEW would have before approval can be provided?

Thank you in advance.

Kind Regards,

Inès Béchameil
Project Manager – Australia

The logo for Neoen, with the word "NEOEN" in a bold, sans-serif font. The "NEO" is in blue and the "EN" is in orange.

Level 21 / 570 George Street, Sydney NSW 2000
M. +61 432 273 429

Appendix D

Minister's Approval of BAMP

OFFICIAL

Australian Government
Department of Climate Change, Energy,
the Environment and Water

EPBC ref: 2021/8957 and 2021/8958

Mr Ralph Mitchell
Junior Construction Project Manager
Neoen Australia Pty Ltd
ralph.mitchell@neoen.com

Approval of Bird Adaptive Management Plan for Goyder South Hybrid Renewable Energy Facility

Dear Mr Mitchell

Thank you for your email dated 5 July 2023 to the Department of Climate Change, Energy, the Environment and Water, seeking approval of the Bird Adaptive Management Plan, in accordance with Condition 4 of approval 2021/8957 and Condition 5 of approval 2021/8958 under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Officers of the department have advised me on the Bird Adaptive Management Plan and the requirements of the conditions of the approval for these projects. On this basis, and as a delegate of the Minister for the Environment and Water (the Minister), I have decided to approve the *Goyder South Hybrid Renewable Energy Facility Stage 1A and Stage 1B Bird Adaptive Management Plan*, Version 5, dated 25 January 2024. This plan must now be implemented.

Approval Condition 22 for EPBC 2021/8957 and Condition 24 for EPBC 2021/8958 allow you (under certain circumstances) to implement revised plans without seeking approval from the Minister. If you require any advice on whether to submit a revised plan for approval, please contact the officer below. When submitting any revised plan to the Minister, please provide a 'tracked changes' version of the plan. I also suggest referring to the [new or increased impact factsheet](#) for guidance on changes to management plans approved under the EPBC Act.

As you are aware, the department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the department on request.

Should you require any further information please contact Tony Dowd by email to PostApproval@dceew.gov.au.

Yours sincerely

Rachel Short
Branch Head
Environment Assessments (Vic and Tas) and Post Approvals
22 February 2024

OFFICIAL

Appendix E

Notification to the Department of the Commencement of Commissioning

From: Ralph Mitchell
Sent: Tuesday, 9 April 2024 9:59 AM
To: EPBC Monitoring <epbcmonitoring@dcceew.gov.au>
Cc: Inès Béchameil <ines.bechameil@neoen.com>
Subject: Goyder Wind Farm 1A Commissioning Commencement

Dear EPBC Team Member,

Please be advised that in accordance with condition 11 of EPBC Approval 2021/8958, commissioning of the first wind turbine at Goyder Wind Farm 1A commenced 4/4/2024.

Kind Regards,

Ralph Mitchell
Junior Construction Project Manager

Level 21 / 570 George Street, Sydney NSW 2000
M. +61 474 731 841

Appendix F

Minister's Approval of PBTL OMP and INTG TEC OMP

OFFICIAL

Australian Government
Department of Climate Change, Energy,
the Environment and Water

EPBC ref: 2021/8957, 2021/8958 and 2021/8959

Ms Inès Béchameil
Project Manager - Australia
Neoen Australia Pty Ltd
ines.bechameil@neoen.com

Approval of Management Plans and Offset Management Plans for: Goyder South Hybrid Renewable Energy Facility - Wind Farm 1B, 5km south Burra SA (EPBC 2021/8957); Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra SA (EPBC 2021/8958); and Goyder South Hybrid Renewable Energy Facility - OTL and Substation, Worlds End, SA (EPBC 2021/8959)

Dear Ms Béchameil

Thank you for your correspondence on 12 June 2023 and for correspondence via Ralph Mitchell on 22 September 2023 and 16 November 2023 to the Department of Climate Change, Energy, the Environment and Water, seeking approval of Management Plans and Offset Management Plans, in accordance with conditions of approvals for 2021/8957, 2021/8958 and 2021/8959 under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Officers of the department have advised me on the Management Plans and Offset Management Plans and the requirements of the conditions of the approval for these projects. On this basis, and as a delegate of the Minister for the Environment and Water (the Minister), I have decided to approve the:

- *Pygmy Blue-tongue lizard Offset Management Plan*, Version 5, dated 29 September 2023, in accordance with Condition 5 of the approval for EPBC Ref 2021/8957, Condition 6 of the approval for EPBC Ref 2021/8958 and Condition 4 of the approval for EPBC Ref 2021/8959;
- *Iron-grass Natural Temperate Grassland of South Australia Offset Management Plan*, Version 5, dated 29 September 2023 in accordance with Condition 6 of the approval for EPBC Ref 2021/8958 and Condition 4 of the approval for EPBC Ref 2021/8959; and
- *Pygmy Blue-tongue Lizard Management Plan*, Version 5, dated 30 November 2023, in accordance with Condition 3 of the approval for EPBC Ref 2021/8959, and in accordance with the requirements of section 143A of the EPBC Act, as meeting the requirements for Condition 3 of the approval for EPBC Ref 2021/8957 and Condition 3 of the approval for EPBC Ref 2021/8958

These plans must now be implemented.

As you are aware, the department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the department on request.

OFFICIAL

OFFICIAL

Should you require any further information please contact Tony Dowd by email either to Tony.Dowd@dcceew.gov.au or to PostApproval@dcceew.gov.au.

Yours sincerely



Brendan Linton-Smith

A/g Branch Head

Environment Assessments (Vic and Tas) and Post Approvals

29/1/2024

OFFICIAL

Appendix G

Notification and Details of Non-compliance With Condition 8

From: Ralph Mitchell <ralph.mitchell@neoen.com>
Sent: Wednesday, 24 September 2025 5:43 PM
To: EPBC Monitoring
Subject: EPBC 2021/8958 - Non-Compliance - Late Submission of Legal Securing Mechanism for PBTL OMP
Attachments: 20250924-NC-EPBC 2021_8958-Late Submission of Legal Securing Mechanism_signed.pdf

Dear Compliance Monitoring Team Member,

Please see attached the non-compliance report for the Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A (EPBC 2021/8958).

Please accept this submission as both the notification **and** the details of the non-compliance, noting that the attached letter includes the information required under both ‘reporting non-compliance’ approval conditions.

Please don’t hesitate to contact me if you have any questions.

Kind Regards,

Ralph Mitchell
Junior Construction Project Manager



Level 21 / 570 George Street, Sydney NSW 2000
M. +61 474 731 841



Goyder Wind Farm 1 Pty Ltd
Level 21, 570 George Street
Sydney NSW 2000

Attention: Compliance Monitoring Team
By email: EPBCMonitoring@awe.gov.au

24 September 2025

Notice of Non-Compliance with the Conditions – EPBC 2021/8958

Dear Compliance Monitoring Team,

We refer to:

- a) the Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10km south Burra, SA (EPBC 2021/8958), dated 5 July 2022 (“**EPBC Approval**”); and

This notification is made pursuant to Condition 18 and Condition 19 of the EPBC Approval.

Capitalised terms used in this notice but not defined have the meaning given in the EPBC Approval.

Non-compliance:

In respect of the Wind Farm 1A component of the Goyder South Hybrid Renewable Energy Facility, on 23 September 2025, the approval holder identified a potential non-compliance with Condition 8 of the EPBC Approval.

During review of the draft EPBC 2021/8958 Annual Compliance Report, it was noted that written evidence was provided to the Department confirming that the offset site required under the approved Pygmy Blue-Tongue Lizard Offset Management Plan (PBTL OMP) had been acquired and secured outside the required timeframe of 12 months from the PBTL OMP approval date.

The PBTL OMP was approved on 29 January 2024. In accordance with Condition 8, written evidence of securing the offset site was required to be submitted to the Department by 29 January 2025. However, the approval holder provided this written evidence on 11 April 2025, after the required timeframe.

Notwithstanding the timing of this submission, the legal mechanism securing the PBTL offset site was executed on 5 September 2023, which was prior to the due date.

Investigation:

Upon identification of the non-compliance, the approval holder undertook an internal investigation. A summary of the investigation is as follows:

- On 23 September 2025, the approval holder reviewed Project correspondence to confirm whether written evidence of securing the offset site had been submitted to the Department within the required timeframe.



- On the same date, it was identified that written evidence confirming acquisition and security of the offset site under the approved PBTL OMP was provided to the Department on 11 April 2025. This was beyond the required timeframe of 12 months from the PBTL OMP approval date.

Non-compliance with the Conditions:

The approval holder is of the opinion that a non-compliance with Condition 8 of the EPBC Approval has occurred. Condition 8 requires the approval holder to provide written evidence to the Department confirming that the offset site required under the approved OMP has been acquired and secured within 12 months of the OMP approval date.

Potential Impacts of the Non-Compliance:

The approval holder considers that the impacts of this non-compliance are administrative in nature and therefore minimal. As the legal securing mechanism for the PBTL offset site was executed on 5 September 2023, it is the approval holder's opinion that the intent of Condition 8 of the EPBC Approval has been met, given that the PBTL offset site was protected well in advance of the due date of 29 January 2025.

Corrective actions:

Upon identification of the non-compliance with Condition 8 of the EPBC Approval, the following action was undertaken:

- A review was conducted of submissions to the Department relating to the written evidence that the legal securing mechanisms for the offsets required under the EPBC Approval had been executed.

Approval holder's review

As part of managing this non-compliance, the approval holder has reviewed the obligations for submission of written evidence relating to the securing of offset sites under the EPBC Approval. We consider that the corrective actions proposed will strengthen our internal controls and reduce the risk of similar non-compliances occurring in the future.

The approval holder takes environmental compliance seriously and will continue to implement proactive measures to ensure all future works remain compliant with the EPBC Approval.

Please do not hesitate to contact me should you require any further information. We welcome any questions the Department may have regarding this matter.

Yours sincerely,

A handwritten signature in black ink, appearing to be "Ralph Mitchell".

Ralph Mitchell

Construction Project Manager

Goyder Wind Farm 1 Pty Ltd

Appendix H

Variation in Progress for Condition 8

From: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>
Sent: Tuesday, 19 August 2025 9:40 AM
To: Ralph Mitchell
Cc: Alyssa WEINSTEIN; Regan HART; Max STRATTON; Kimberly GLOVER; Sara BROOMHALL
Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility
- Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Hi Ralph,

Please excuse my delayed reply.

Thank you for paying the cost recovery fee. We are happy to work the requested variation into the EPBC 2021/8958 approval.

We are finalising the condition set with the new changes to Condition 8, and expect it will be with Neoen very shortly.

All the best,

Mitchell Hodgson
Assessment Officer

Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

From: Ralph Mitchell <ralph.mitchell@neoen.com>
Sent: Wednesday, 13 August 2025 1:41 PM
To: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>
Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>
Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

OFFICIAL

Hi Mitchell,

Could you please provide an update on the variation, noting that the invoice has now been paid (remittance below):

08/08/2025	Ref TT2025136059 Your Reference 3-AU-0048-REM-29 MISCELLANEOUS DEBIT	2,690.00
------------	---	----------

As you are aware, we are undergoing a variation for EPBC 2021/8957, and I was hoping we could please capture the following variation for Goyder 1A as well:

- Condition 8 of EPBC 2021/8958 - 'written evidence for securing the offset sites' – specifically, for the PBT L OMP:
 - o From discussions on EPBC 2021/8957, I understand that it is DCCEEW's expectation that the national park is established for this condition to be satisfied, and for the offset to be officially protected (not just covered under the Gorge Management Agreement)
 - o It has been agreed as part of the variation to EPBC 2021/8957 that we would vary the equivalent condition to allow sufficient time to establish the area as a National Park, noting that there were some delays due to the resolution of a clearance issue with Parks, and that we are currently revising the PBT L OMP to align better with National Park Management Activities (aiming to submit next week)
 - o We are aiming for establishment of the area as a national park by the end of the year, but please note that as per the GMA, the declaration of the Gorge Land as a National Park is the responsibility of the Minister
 - o As part of EPBC 2021/8957, DCCEEW's suggestion is as follows - "Proposal to increase time in which to secure the offset to 30 June 2026 to allow finalisation of the National Park declaration"
 - o Could you please advise if we are able to vary condition 8 of EPBC 2021/8959 in the same manner

I note that the above suggested variation would also impact the legal securing mechanism for the INTG OMP. Whilst we consider the Landowner Agreement for the INTG Offset to be the legal securing mechanism for protection of this area, we are still in the process of establishing the area under a Heritage Agreement. We anticipate that the Heritage Agreement should be established within Q1 2025, as we work through the details with NVC and the landowner.

Kind Regards,

Ralph Mitchell
 M. +61 474 731 841

OFFICIAL

From: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>
Sent: Friday, 18 July 2025 4:55 PM
To: Ralph Mitchell <ralph.mitchell@neoen.com>
Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>
Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Hi Ralph,

Please see updated invoice attached.

All the best,

Mitchell Hodgson
Assessment Officer

Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

From: Ralph Mitchell <ralph.mitchell@neoen.com>
Sent: Friday, 18 July 2025 2:57 PM
To: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>

Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>

Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

OFFICIAL

Hi Mitchell,

Level 21 / 570 George Street is correct, thanks.

Kind Regards,

Ralph Mitchell
M. +61 474 731 841

OFFICIAL

From: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>

Sent: Friday, 18 July 2025 2:10 PM

To: Ralph Mitchell <ralph.mitchell@neoen.com>

Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>

Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Hi Ralph,

Just finalising the new invoice.

Is the Goyder Wind Farm 1 Pty Ltd address Level 21 / 570 George Street or 227 Elizabeth St Level 10?

Kind regards,

Mitchell Hodgson
Assessment Officer

Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngannawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

From: Ralph Mitchell <ralph.mitchell@neoen.com>
Sent: Monday, 14 July 2025 6:38 PM
To: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>
Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>
Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

OFFICIAL

Thanks Mitchell,

Could you please re-issue the invoice to Goyder Wind Farm 1 Pty Ltd (Goyder 1A entity).

Kind Regards,

Ralph Mitchell
M. +61 474 731 841

OFFICIAL

From: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>
Sent: Monday, 14 July 2025 9:42 AM
To: Ralph Mitchell <ralph.mitchell@neoen.com>
Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>
Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Hi Ralph,

Please excuse the delay with getting the invoice to you. See attached.

If there are any issues with details on the invoice, please let me know. When payment is made, please send a copy of proof of payment.

Any issues please let me know,

All the best,

Mitchell Hodgson
Assessment Officer

Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

From: Mitchell HODGSON

Sent: Thursday, 10 July 2025 11:56 AM

To: Ralph Mitchell <ralph.mitchell@neoen.com>

Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>

Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

Hi Ralph,

That shouldn't be an issue. I'll send you a separate email updating on both variation requests.

Cheers,

Mitchell Hodgson

Assessment Officer

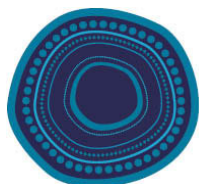
Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

From: Ralph Mitchell <ralph.mitchell@neoen.com>

Sent: Thursday, 10 July 2025 11:01 AM

To: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>

Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>

Subject: RE: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

OFFICIAL

Hi Mitchell,

Ok to proceed with the variation thanks. Noting that our payments typically take ~1 month, is there the potential to issue the draft variation in advance of payment being received?

Kind Regards,

Ralph Mitchell

M. +61 474 731 841

OFFICIAL

From: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>

Sent: Thursday, 10 July 2025 10:20 AM

To: Ralph Mitchell <ralph.mitchell@neoen.com>

Cc: Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Max STRATTON <Max.Stratton@dcceew.gov.au>

Subject: Cost Recovery to Variation of EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Good morning Ralph,

As discussed, we've received your variation request for EPBC 2021/8958 - Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra. Variation requests are subject to a cost recoverable fee of \$2,690. This fee must be paid before the department can provide NEOEN with the draft decision instrument with the proposed changes to conditions for review and consideration.

Please acknowledge by return email that you are happy to proceed with the fee for the variation request and I will provide you with a statement of charges. Once you have paid the fee we will forward you the draft decision instrument.

If you have any questions, please feel free to ask.

All the best,

Mitchell Hodgson
Assessment Officer

Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

P: 02 5162 3352 E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

----- **IMPORTANT** - This email and any attachments have been issued by the Commonwealth of Australia (Commonwealth). The material transmitted is for the use of the intended recipient only and may contain confidential, legally privileged, copyright or personal information. You should not copy, use or disclose it without authorisation from the Commonwealth. It is your responsibility to check any attachments for viruses and defects before opening or forwarding them. If you are not an intended recipient, please contact the sender of this email at once by return email and then delete both messages. Unintended recipients must not copy, use, disclose, rely on or publish this email or attachments. The Commonwealth is not liable for any loss or damage resulting from unauthorised use or dissemination of, or any reliance on, this email or attachments. If you have received this e-mail as part of a valid mailing list and no longer want to receive a message such as this one, advise the sender by return e-mail accordingly. This notice should not be deleted or altered -----

Appendix I

Proclamation Published in South Australian Government Gazette

Published in *Gazette 20.11.2025 p 4498*

South Australia

National Parks and Wildlife (Jaki Ina – Worlds End Gorge National Park) Proclamation 2025

under section 28(1) of the *National Parks and Wildlife Act 1972*

1—Short title

This proclamation may be cited as the *National Parks and Wildlife (Jaki Ina – Worlds End Gorge National Park) Proclamation 2025*.

2—Commencement

This proclamation comes into operation on the day on which it is made.

3—Constitution of Jaki Ina – Worlds End Gorge National Park

The following Crown land is constituted as a national park and assigned the name *Jaki Ina – Worlds End Gorge National Park*:

Allotment 101 in Deposited Plan 137371, Hundred of Apoina, County of Burra

Allotment 11 in Deposited Plan 130398, Hundred of Apoina, County of Burra

Made by the Governor

being of the opinion that the Crown land described in clause 3 is of national significance by reason of the wildlife and natural features of the land and with the advice and consent of the Executive Council
on 20 November 2025

Appendix J

Request for Extension of Time for Submission of PBTL Research Plan

From: Inès Béchameil <ines.bechameil@neoen.com>
Sent: Wednesday, 5 July 2023 5:08 PM
To: Dowd, Tony
Cc: Post Approval; EPBC Monitoring
Subject: Goyder South Hybrid Renewable Energy Facility - Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan
Attachments: 2023-07-05 GSWF-DCCEEW-Request-to-Vary-Conditions-of-Approval.pdf

Dear Tony,

In respect of the Wind Farm 1A component of the Goyder south Hybrid Renewable Energy Facility, we as the approval holder, request for the Department of Climate Change, Energy, the Environment and Water (the **Department**) to vary Condition 9 of the *Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10km south Burra SA (EPBC 2021/8958)*, dated 5 July 2022.

Condition 9 requires the Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan (PBTL Research plan) to be submitted on the 05 July 2023. As discussed previously, we kindly request for the Department to consider an extension of time for the submission of this plan. Details and explanations are provided in the letter attached.

Kind Regards,

Inès Béchameil
Project Manager – Australia



Level 21 / 570 George Street, Sydney NSW 2000
M. +61 432 273 429

Appendix K

Minister's Approval of PBTL Research Plan

OFFICIAL

Australian Government
Department of Climate Change, Energy,
the Environment and Water

EPBC ref: 2021/8958

Mr Ralph Mitchell
Junior Construction Project Manager
Neoen Australia Pty Ltd
ralph.mitchell@neoen.com

Approval of Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan (PBTL Research Plan) for Goyder South Hybrid Renewable Energy Facility

Dear Mr Mitchell

Thank you for your email dated 29 January 2024 to the Department of Climate Change, Energy, the Environment and Water, seeking approval of the PBTL Research Plan, in accordance with Condition 9 of approval 2021/8958 under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Officers of the department have advised me on the PBTL Research Plan and the requirements of the conditions of the approval for this project. On this basis, and as a delegate of the Minister for the Environment and Water (the Minister), I have decided to approve the *Goyder South Hybrid Renewable Energy Facility Pygmy Blue-tongue Lizard Scientific Monitoring and Research Plan*, Version 2, dated 24 January 2024. This plan must now be implemented.

Approval Condition 24 for EPBC 2021/8958 allow you (under certain circumstances) to implement revised plans without seeking approval from the Minister. If you require any advice on whether to submit a revised plan for approval, please contact the officer below. When submitting any revised plan to the Minister, please provide a 'tracked changes' version of the plan. I also attach a fact sheet providing guidance on new or increased impact relating to changes to approved management plans under EPBC Act.

As you are aware, the department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the department on request.

Should you require any further information please contact Tony Dowd by email to PostApproval@dcceew.gov.au.

Yours sincerely

Rachel Short
Branch Head
Environment Assessments (Vic and Tas) and Post Approvals
20 February 2024

Attached: [New or Increased Impact factsheet](#)

DCCEEW.gov.au
John Gorton Building - King Edward Terrace, Parkes ACT 2600 Australia
GPO Box 3090 Canberra ACT 2601 ABN: 63 573 932 849
LET 510 v2.3

OFFICIAL

Appendix L

Variation in Progress for Condition 9 and 10

From: Mitchell HODGSON <Mitchell.HODGSON@dcceew.gov.au>
Sent: Monday, 7 July 2025 4:06 PM
To: Ralph Mitchell
Cc: Sofia Cremonini; Inès Béchameil; Alyssa WEINSTEIN; Max STRATTON; Travis How; Emma Tremain; Hilary Pocock; Regan HART
Subject: RE: PBTL Research Plan - Recommended Variation [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Hi Ralph,

Thank you for the email. Apologies for not replying to your previous correspondence.

We are finalising the varied condition set and will provide them to NEOEN for comment shortly.

If you have any other questions, please let me know.

All the best,

Mitchell Hodgson
Assessment Officer

Environment Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

P: 02 5162 3352 E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

From: Ralph Mitchell <ralph.mitchell@neoen.com>
Sent: Wednesday, 2 July 2025 3:36 PM
To: Mitchell HODGSON <mitchell.hodgson@dcceew.gov.au>
Cc: Sofia Cremonini <sofia.cremonini@neoen.com>; Inès Béchameil <ines.bechameil@neoen.com>; Alyssa WEINSTEIN <alyssa.weinstein@dcceew.gov.au>; Max STRATTON <max.stratton@dcceew.gov.au>; travis.how@umwelt.com.au; emma.tremain@umwelt.com.au; Hilary Pocock <Hilary.Pocock@neoen.com>
Subject: RE: PBTL Research Plan - Recommended Variation [SEC=OFFICIAL]

OFFICIAL

Hi Mitchell,

Just following up on the below please.

Kind Regards,

Ralph Mitchell
M. +61 474 731 841

OFFICIAL

From: Ralph Mitchell
Sent: Wednesday, 28 May 2025 6:43 PM
To: Mitchell HODGSON <mitchell.hodgson@dcceew.gov.au>
Cc: Sofia Cremonini <sofia.cremonini@neoen.com>; Inès Béchameil <ines.bechameil@neoen.com>; Alyssa WEINSTEIN <alyssa.weinstein@dcceew.gov.au>; Max STRATTON <max.stratton@dcceew.gov.au>; travis.how@umwelt.com.au; emma.tremain@umwelt.com.au; Hilary Pocock <Hilary.Pocock@neoen.com>
Subject: RE: PBTL Research Plan - Recommended Variation [SEC=OFFICIAL]

Thanks Mitchell,

We note that the approved PBTL Research Plan remains in place for the Goyder 1A and 1B EPBC Approvals.

With the intention to submit a variation to Conditions 9 and 10 of the Goyder 1A Approval (aimed at enabling research activities to be completed at the Goyder North locations), assuming that this would be approved, would it then be advisable to formally withdraw the currently approved PBTL Research Plan (after the variation was approved)? In this situation, the PBTL Research Plan would then be resubmitted within the agreed upon timeframes?

Please note as well that I will be on leave from 30/5, returning 16/6, so please direct all correspondence on this matter to Sofia and Ines (cc'd).

Kind Regards,

Ralph Mitchell
M. +61 474 731 841

From: Mitchell HODGSON Mitchell.HODGSON@dcceew.gov.au
Sent: Wednesday, 14 May 2025 9:09 AM
To: Ralph Mitchell <ralph.mitchell@neoen.com>; Alyssa WEINSTEIN <Alyssa.Weinstein@dcceew.gov.au>

Cc: Max STRATTON <Max.Stratton@dcceew.gov.au>; Regan HART <Regan.Hart@dcceew.gov.au>; Travis How <travis.how@umwelt.com.au>; Hilary Pocock <Hilary.Pocock@neoen.com>; Emma Tremain <emma.tremain@umwelt.com.au>; Inès Béchameil <ines.bechameil@neoen.com>; Sofia Cremonini <sofia.cremonini@neoen.com>

Subject: RE: PBTL Research Plan - Recommended Variation [SEC=OFFICIAL]

EXTERNAL: Do not click links or open attachments unless you recognize the sender and know the content is safe.

OFFICIAL

Good morning Ralph,

Thank you for the email. We can confirm that as discussed in the meeting, it would be appropriate to vary **Condition 9** and **Condition 10** as you have highlighted. We will begin progressing with a draft condition set, and will provide it to you for feedback.

In the meantime, should you have any comments please don't hesitate to get in contact.

Kind regards,

Mitchell Hodgson

Assessment Officer

Nature Positive Regulation Division | Environmental Assessments Vic & Tas & Post Approvals Branch | Post Approvals (WA, SA & NT) Section

Ngunnawal Country, John Gorton Building, GPO Box 3090 ACT 2601

Department of Climate Change, Energy, the Environment and Water

P: 02 5162 3352 E: mitchell.hodgson@dcceew.gov.au

DCCEEW.gov.au ABN 63 573 932 849



Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

OFFICIAL

From: Ralph Mitchell <ralph.mitchell@neoen.com>

Sent: Friday, 9 May 2025 2:52 PM

To: Alyssa WEINSTEIN <alyssa.weinstein@dcceew.gov.au>
Cc: Mitchell HODGSON <mitchell.hodgson@dcceew.gov.au>; Max STRATTON
<max.stratton@dcceew.gov.au>; Regan HART <regan.hart@dcceew.gov.au>; Travis How
<travis.how@umwelt.com.au>; Hilary Pocock <Hilary.Pocock@neoen.com>; Emma Tremain
<emma.tremain@umwelt.com.au>; Inès Béchameil <ines.bechameil@neoen.com>; Sofia Cremonini
<sofia.cremonini@neoen.com>
Subject: PBTL Research Plan - Recommended Variation

Hi Alyssa,

Thank you for your time on Tuesday (6/5) to discuss the PBTL Research Plan for the 2021/8958 and 2021/8957 EPBC Approvals.

Following that discussion, I was just hoping to clarify on the variation request that was suggested, to accommodate for the proposed research at Goyder North. My understanding is that the following recommendations were made, could you please confirm (for the 1A Approval):

- 10.c (1A) – extend the submission date for the preliminary assessment report from 90 months, as required
- 10.d (1A) – extend the submission date for the final assessment report from 13 years, as required

You have also advised that the adopted mechanism of submitting a RAMP was not appropriate for the revised PBTL Research Plan. As such, I was hoping to clarify if varying the below condition would allow for submission of the revised PBTL Research Plan:

- 9 (1A) – vary the condition to allow submission of the Plan beyond '12 months of the date of this approval'.
i.e. allow for submission of the PBTL Research Plan at a later date when certainty is provided on the Goyder North EPBC Approval?

Alternatively, could you please advise how the revised PBTL Research Plan should be submitted.

Kind Regards,

Ralph Mitchell
Junior Construction Project Manager



Level 21 / 570 George Street, Sydney NSW 2000
M. +61 474 731 841

----- IMPORTANT - This email and any attachments have been issued by the Commonwealth of Australia (Commonwealth). The material transmitted is for the use of the intended recipient only and may contain confidential, legally privileged, copyright or personal information. You should not copy, use or disclose it without authorisation from the Commonwealth. It is your responsibility to check any attachments for viruses and defects before opening or forwarding them. If you are not an intended recipient, please contact the sender of this email at once by return email and then delete both messages. Unintended recipients must not copy, use, disclose, rely on or publish this email or attachments. The Commonwealth is not liable for any loss or damage resulting from unauthorised use or dissemination of, or any reliance on, this email or attachments. If you have received this e-mail as part of a valid mailing list and no longer want to receive a message such as this one, advise the sender by return e-mail accordingly. This notice should not be deleted or altered -----

Appendix M

Extract From the Signed Contract for the PBTL Research Plan



Research Services Agreement

Between:

Flinders University (ABN 65 542 596 200) of Sturt Road, Bedford Park, South Australia, 5042
("the University")

and

Goyder Wind Farm 1 Pty Ltd (ACN 643 229 869) as trustee for the Goyder Wind Farm 1 Trust (ABN 13 445 650 867) ("**GWF 1**") and Goyder Wind Farm 1B Pty Ltd (ACN 649 965 944) as trustee for the Goyder Wind Farm 1B Trust (ABN 52 359 859 487) ("**GWF 1B**") of Level 21, 570 George Street, Sydney NSW 2000 (together, "the **Sponsor**")

Background

- A Flinders has a research interest and expertise in an area which is of interest to the Sponsor.
- B Flinders and the Sponsor have agreed and finalised the PTBL Research Plan.
- C The Sponsor has asked Flinders to implement the PTBL Research Plan at the Goyder South Wind Farm located near the towns of Burra and Robertstown in South Australia's Mid North region, approximately 2 hours' drive from Adelaide.
- D Flinders agrees to carry out the Project, and the Sponsor agrees to provide funding and certain other inputs into the Project, in accordance with this Agreement.

EXECUTED as an agreement

Signed for Flinders University by an authorised representative:



Signature of officer

Timothy Cavagnaro

Name of officer (print)

Acting Deputy Vice-Chancellor (Research)

Position title

09/07/2024

Date

Executed by Goyder Wind Farm 1 Pty Ltd as trustee for the Goyder Wind Farm 1 Trust pursuant to section 127 of the Corporations Act 2001

Signed by:

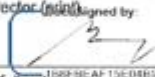

752A678510C547B

Signature of director

Jean-Christophe Cheylus

Name of director (print)

Signed by:


102F9EAF15E04B9

Signature of director

Tony Ng

Name of director (print)

10/7/2024

Executed by Goyder Wind Farm 1B Pty Ltd as trustee for the Goyder Wind Farm 1B Trust pursuant to section 127 of the Corporations Act 2001

Signed by:


752A678510C547B

Signature of director

Jean-Christophe Cheylus

Name of director (print)

Signed by:


102F9EAF15E04B9

Signature of director

Tony Ng

Name of director (print)

10/7/2024

Appendix N

Notification and Details of Non-compliance With Condition 10

From: Ralph Mitchell <ralph.mitchell@neoen.com>
Sent: Wednesday, 24 September 2025 5:45 PM
To: EPBC Monitoring
Subject: EPBC 2021/8958 - Non-Compliance - Late Submission of the Contract for the PBTL Research Plan
Attachments: 20250924-NC-1A-Late Submission of PBTL Research Plan Contract.pdf

Dear Compliance Monitoring Team Member,

Please see attached the non-compliance report for the Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A (EPBC 2021/8958).

Please accept this submission as both the notification **and** the details of the non-compliance, noting that the attached letter includes the information required under both ‘reporting non-compliance’ approval conditions.

Please don’t hesitate to contact me if you have any questions.

Kind Regards,

Ralph Mitchell
Junior Construction Project Manager



Level 21 / 570 George Street, Sydney NSW 2000
M. +61 474 731 841



Goyder Wind Farm 1 Pty Ltd
Level 21, 570 George Street
Sydney NSW 2000

Attention: Compliance Monitoring Team
By email: EPBCMonitoring@awe.gov.au

24 September 2025

Notice of Non-Compliance with the Conditions – EPBC 2021/8958

Dear Compliance Monitoring Team,

We refer to:

- a) the Goyder South Hybrid Renewable Energy Facility – Wind Farm 1A, 10km south Burra, SA (EPBC 2021/8958), dated 5 July 2022 (“**EPBC Approval**”); and

This notification is made pursuant to Condition 18 and Condition 19 of the EPBC Approval.

Capitalised terms used in this notice but not defined have the meaning given in the EPBC Approval.

Non-compliance:

In respect of the Wind Farm 1A component of the Goyder South Hybrid Renewable Energy Facility, on 23 September 2025, the approval holder identified a potential non-compliance with Condition 10 of the EPBC Approval.

During review of the draft EPBC 2021/8958 Annual Compliance Report, it was noted that signed contracts exchanged between a suitable qualified researcher and the approval holder committing both parties to implement the Pygmy Blue-Tongue Lizard Research Plan (PBTL Research Plan), were provided to the Department outside the required timeframe of 24 months from the date of this EPBC Approval.

In accordance with Condition 10, the contract was to be provided to the Department by 5 July 2024. However, the approval holder provided a copy of this contract on 14 April 2025, after the required timeframe.

Notwithstanding the timing of this submission, the contract requires both parties to implement the PBTL Research Plan within 24 months of the date of the EPBC Approval.

Investigation:

Upon identification of the non-compliance, the approval holder undertook an internal investigation. A summary of the investigation is as follows:

- On 23 September 2025, the approval holder reviewed project correspondence to determine whether a copy of the contract had been submitted to the Department within the required timeframe.
- On the same date, it was confirmed that the contract had been provided to the Department on 14 April 2025, which was beyond the required timeframe of 24 months from the date of the EPBC Approval.



Non-compliance with the Conditions:

The approval holder acknowledges that a non-compliance with Condition 10 of the EPBC Approval has occurred. Condition 10 requires the approval holder to provide the Department with signed contracts exchanged between a suitably qualified researcher and the approval holder, committing both parties to implement the PBTL Research Plan within 24 months from the date of the EPBC Approval.

Potential Impacts of the Non-Compliance:

The approval holder considers the impacts of this non-compliance to be administrative in nature and therefore minimal. Given that the contract commits both parties to implement the PBTL Research Plan within 24 months from the date of the EPBC Approval, it is the approval holder's view that the intent of Condition 10 has been satisfied.

Corrective actions:

Upon identification of the non-compliance with Condition 10 of the EPBC Approval, the following action was undertaken:

- A review of the deliverables associated with the PBTL Research Plan was conducted to confirm that the required timeframes had been met.

Approval holder's review

As part of managing this non-compliance, the approval holder has reviewed the obligations related to the submission of the contract under Condition 10 of the EPBC Approval. We believe that the proposed corrective actions will enhance our internal controls and significantly reduce the risk of similar non-compliances occurring in the future.

The approval holder takes environmental compliance seriously and will continue to implement proactive measures to ensure all future works remain compliant with the EPBC Approval.

Please do not hesitate to contact me should you require any further information. We welcome any questions the Department may have regarding this matter.

Yours sincerely,

Ralph Mitchell

Construction Project Manager

Goyder Wind Farm 1 Pty Ltd

Appendix O

Flinders University Report on PBTL Research Undertaken at GSWF WTG SG044

Goyder South NEOEN wind farm pygmy bluetongue research

Reporting period: 15th April 2026- 15th July 2026

Month 9 Milestone (Final report)

Stephanie Deering¹, Julia Jenkins¹, Kaiah Fisher¹, Case Case¹, Nat Wallace¹, Martin Scuffins², Bonnie T. Derne¹, Dee Trewartha¹, Michael G. Gardner¹

1. School of Biological Sciences, Flinders University, GPO Box 2100, Adelaide, South Australia 5001, Australia
2. Leigh Valley Hawk and Owl Sanctuary, Garibaldi, Victoria 3342, Australia

Summary

This project investigates how wind farm infrastructure may influence the biology and behaviour of the endangered pygmy bluetongue skink (*Tiliqua adelaidensis*) in South Australia's Mid North region. The research focus of this offshoot project is to determine whether shadow flicker and associated visual stimuli from wind turbines influences key survival behaviours, specifically vigilance and avoidance responses to aerial predators.

During this reporting period (Month 9 Milestone), all remaining behavioural scoring was completed, the full combined dataset across all three sampling periods (November 2025, December 2025, and March 2026) was finalised, and the statistical analysis was carried out. Analyses covered general lizard activity patterns, including daily activity timing, proportion of the day spent on the surface, basking exposure, and general behaviour change rate. Anti-predator responses to the staged kestrel flights were also assessed, including activity at the moment of the flight, retreat behaviour, reaction time, and time to re-emergence. Manuscript drafting for a scientific publication is underway and this report will form the basis of that publication.

The milestone objectives of completing behavioural scoring and finalising data analysis have been met, and the project is progressing according to schedule. The next phase (July–October 2026) will focus on finalising the manuscript (attached below) and preparing it for submission to a peer-reviewed journal.

Progress to date

Over this reporting period, we have made substantive progress towards achieving the study objectives, specifically:

- Completed behavioural scoring of all remaining footage from November 2025, December 2025, and March 2026.
- Completed statistical analysis of daily activity timing, surface activity, basking exposure, and anti-predator responses across all sites and sampling periods.

- Identified a clear pattern in which lizards at the wind farm flicker site showed delayed emergence and a shifted daily activity peak relative to control sites, while retaining an anti-predator response to the staged kestrel flight comparable to control-site lizards.
- Documented incidental brown snake predator activity across the study sites, providing supplementary evidence of natural predation pressure alongside the staged aerial trials.
- Drafted the Introduction, Methods, Results, and Discussion sections of the manuscript reporting these findings.
- Captured and processed 57 individuals across all sites during the March 2026 field session, including 3 neonates. Neonates were recorded at both wind farm sites (1 at the no-flicker site, 2 at the flicker site).

Potential challenges and points for consideration

Data consolidation and analysis progressed smoothly overall. Looking forward, we would like to highlight the following constraints & considerations:

- As anticipated in the 6 Month report, behavioural scoring of the full dataset was labour and time-intensive, and finalising the combined dataset required a detailed completeness audit to ensure all recorded footage was correctly incorporated.
- Sample sizes at some sites and in some sampling periods, particularly the wind farm no-flicker site in November 2025, remain small, which limits statistical power for some site-level comparisons. This is consistent with the limitation flagged in earlier reports regarding PBT detection rates at the Goyder South [REDACTED] sites.
- As flagged in the Month 3 and Month 6 reports, the current dataset is based on a single wind turbine and a single pair of control sites. This is a reasonable scope for demonstrating the study's methodology and identifying an initial behavioural signal, but a larger, multi-site dataset would substantially strengthen confidence in these findings and their generalisability across turbine and habitat conditions. Therefore this project serves well as a precursor to the main Goyder South research that will be undertaken by Flinders University.
- Neonate numbers were low ($n = 3$) across all sites, limiting confidence in any conclusions about reproductive output near versus away from the turbine. Detectability depends heavily on survey timing relative to parturition, so these numbers are a preliminary indication rather than a robust site comparison and were not included as a formal result in the manuscript.

Next steps

- Finalise the manuscript for submission to a peer-reviewed journal. Once the final manuscript draft has been prepared Flinders University will seek approval for publishing from NEOEN as per the agreement, however comments can be made on

this draft manuscript as essentially the final one will be similar and likely all content and analyses are already presented.

Milestone assessment

The Month 9 milestone (final report) has been achieved in accordance with the project plan. Behavioural scoring of all footage collected across the study has been completed, the combined dataset has been audited and finalised, and the full statistical analysis has been carried out. Manuscript drafting is well advanced, and the resulting draft manuscript is provided below. No significant deviations from the planned methodology or timeline have occurred during this reporting period.

1. Abstract

Wind energy is expanding globally as a renewable alternative to fossil fuels, but turbine-associated noise and visual disturbance can alter wildlife behaviour. Among the behaviours at risk is anti-predator response, which is critical for survival and especially consequential in endangered species with small, fragmented populations. We tested whether wind farm development affects anti-predator behaviour in the pygmy bluetongue lizard (*Tiliqua adelaidensis*), an endangered species occurring in a region of South Australia now experiencing wind farm expansion. We staged aerial predation events, using a trained nankeen kestrel, over lizard burrows at four sites in South Australia's Mid North: a shadow flicker zone, an adjacent no-flicker zone, and two control sites, across three sampling periods. We found that lizards at the flicker site emerged later and showed a delayed activity peak, though total surface time did not differ from controls. However, this activity change did not translate into a weaker predator response: flicker-site lizards were the most active during the staged flight, and all retreated within one minute, with reaction times matching the control. Anti-predator behaviour persisted across all sites, from an acute freeze at the controls to prolonged post-retreat caution at the flicker site and sustained caution at the no-flicker site, potentially linked to elevated natural snake predation there. We conclude that turbine disturbance shifted activity timing without impairing predator response, however, even subtle shifts of this kind warrant consideration in wind farm impact assessments for this endangered species. Further research is warranted at other turbine sites to rule out site specific reactions.

2. Introduction

Wind energy has emerged as a leading candidate for transitioning to renewable, low-emission electricity generation at a large scale (Kumar et al., 2016). However, the ecological sustainability of wind energy depends not only on reducing emissions but also on understanding how turbine-associated disturbances affect wildlife (Sander et al., 2024). Although wind energy plants are generally less detrimental to the environment than fossil-fuel power stations, they introduce several disturbance mechanisms that can disrupt native species (Sander et al., 2024; Schuster et al., 2015). These impacts primarily arise through noise pollution and visual disturbances such as shadow flicker (Fernández-Mellado & EL, 2023; Gémard et al., 2025; Jonasson et al., 2024; Keehn & Feldman, 2018a; Kumara et al., 2022; Lehnardt et al., 2024; Schöll & Nopp-Mayr, 2021; Teff-Seker et al., 2022)

Noise pollution from wind turbines is substantial and can alter the acoustic environment over large distances (Josimović et al., 2023; Lehnardt et al., 2024; Teff-Seker et al., 2022). This altered acoustic environment is problematic as turbines are often placed in remote or otherwise undisturbed habitats where acoustic cues are essential for survival, especially for endangered species (Buxton et al., 2017; Teff-Seker et al., 2022). Elevated background noise can mask biologically important signals such as alarm calls, mate-attraction calls, or predator cues (Teff-Seker et al., 2022), impairing risk assessment and altering behavioural decisions. Animals exposed to chronic noise often respond with increased hiding, retreating, or heightened vigilance, reducing opportunities for foraging, mate searching, and parental care (Kight & Swaddle, 2011) These effects have been documented across diverse taxa: marine mammals exposed to turbine construction noise (Madsen et al., 2006), altered calling

behaviour in frogs (de Oliveira et al., 2025; Park & Do, 2022; Trowbridge & Litzgus, 2022), displacement responses in birds (Madsen & Boertmann, 2008; Marques et al., 2021) and changes in avian vocal patterns (Gómez-Catasús et al., 2022; Lehnardt et al., 2025). Collectively, these behavioural shifts can reduce fitness (Kight & Swaddle, 2011).

Visual disturbances by wind turbines also contribute to wildlife disruption. Shadow flicker, created by the moving shadows cast by rotating blades, can produce unpredictable visual stimuli that animals may interpret as looming threats or predator movement (Nazir et al., 2020; Taubmann et al., 2021; Williamson et al., 2024). This flicker can also trigger avoidance behaviour (e.g. Skarin et al., 2018; Taubmann et al., 2021; Tolvanen et al., 2023), potentially altering movement patterns and spatial use of habitat. For species that rely on homing and navigation through visual topographic cues, shadow flicker associated with wind farms have disrupted orientation and movement patterns (Jonasson et al., 2024). By altering key sensory cues, turbine-associated noise and shadow flicker can reshape risk perception and behavioural decision-making, highlighting the need to understand their effects on anti-predator responses.

Many species rely on rapid and accurate detection of predators, and anti-predator behaviour is critical for survival. However, expressing these behaviours carries energetic and opportunity costs, particularly when perceived risk is high but actual risk is low (Creel et al., 2017; Lima & Dill, 1990; Tollrian & Harvell, 1999). Disturbances that mask or distort sensory cues can shift risk assessment thresholds, potentially causing animals to over, or under-respond to threats. Anthropogenic disturbance often elevates perceived threat levels, increasing vigilance and altering anti-predator responses (Geffroy et al., 2020). Noise, in particular, has been found to increase vigilance and the speed of antipredator responses in species such as prairie dogs (Shannon et al., 2014), mongooses (Westover et al., 2025) and swallows (Matyjasiak et al., 2024). Wind turbine-associated noise and movement have produced similar effects in some taxa. For example, Californian ground squirrels (*Spermophilus beecheyi*) show elevated vigilance and reduced alarm-calling efficiency in high-noise turbine areas (Kikuchi, 2008; Rabin et al., 2006). Side-blotched lizards have also been found to be less wary of predators in wind turbine areas (Keehn & Feldman, 2018b). These examples suggest that wind farm disturbance can alter risk perception, but the current literature is limited and heavily-biased toward certain taxa.

Despite growing recognition that wind turbines alter wildlife behaviour, significant gaps remain in our understanding of how these disturbances affect anti-predator responses, particularly in reptiles. Existing research has focused predominantly on birds and mammals, leaving reptiles broadly underrepresented despite their ecological importance, sensitivity to habitat disturbance (Doherty et al., 2020; Tan et al., 2023) and reliance on sensory cues (Amo et al., 2004; Crowe-Riddell & Lillywhite, 2023; Head et al., 2002; Recio et al., 2020). Reptiles depend on behavioural thermoregulation, requiring frequent movements between refuge sites and basking locations to maintain optimal body temperatures (Moore et al., 2018; Trewartha et al., 2025). Because thermoregulation depends on predictable access to safe refuges, any disturbance that alters refuge quality or perceived risk can directly affect daily activity patterns. Burrow-dwelling species are especially vulnerable as they depend on a

single or small number of refuge sites. Although turbine proximity has been linked to altered wariness in side-blotched lizards (Keehn & Feldman, 2018b), the effects of turbine-associated sensory disturbance on predator detection or retreat behaviour have not otherwise been investigated in reptiles.

The pygmy bluetongue (*Tiliqua adelaidensis*) is an endangered, burrow-dependent reptile species restricted to fragmented native temperate grasslands in the Mid North of South Australia, in areas predominantly used for livestock grazing and increasingly overlapping with wind farm development (Clayton & Bull, 2017; Fordham et al., 2012; Nielsen et al., 2016; Pettigrew & Bull, 2011; Souter et al., 2007). They inhabit abandoned wolf (*Lycosidae* sp.) and trapdoor (*Blakistonia* sp.) spider burrows (Fellows et al., 2009; Milne et al., 2003; Souter et al., 2007). As they don't dig their own burrows, they are heavily reliant on spiders occupying the area (Clayton & Bull, 2015; Clayton et al., 2020). The burrows provide shelter from climatic conditions and predators, and give a site to ambush prey (Daniell et al., 2021). Unlike many lizard species, pygmy bluetongues lack the fracture planes needed for caudal autotomy and so cannot shed their tail to escape a predator (Shea, 1992), making burrow refuge their primary means of avoiding capture. Key predators of *T. adelaidensis* are snakes, particularly brown snakes, and avian predators such as kestrels and brown falcons (Daniell et al., 2021; Ebrahimi et al., 2015). Given their small population size, restricted range, and reliance on another species for shelter, an effective anti-predator response is essential for their survival and increasing wind farm development introduces a novel disturbance to this response.

Wind farm development is expanding within the pygmy bluetongue's fragmented range, yet the behavioural consequences of turbine-associated sensory disturbance remain unstudied in this species. Their reliance on precise sensory cues, predictable refuge conditions, and fine-scaled emergence and retreat behaviour suggests that pygmy bluetongues may be particularly vulnerable to disturbance-driven changes in risk perception. Any disruption to predator detection or retreat behaviour could directly affect survival and, in an endangered species, influence population-level recovery. This study addresses these gaps by quantifying how proximity to a wind turbine affects activity and anti-predator behaviour to avian threats in wild pygmy bluetongue lizards across sites differing in turbine-disturbance exposure. To examine how turbine related sensory disturbance influences anti-predator behaviour, we used a live nankeen kestrel (*Falco cenchroides*) to stage an aerial predation events over known pygmy bluetongue burrows. This approach provided a realistic predator stimulus that allowed us to measure retreat behaviour under natural conditions. Trials were conducted at sites that differed in their exposure to turbine disturbance: burrows within the shadow flicker zone, burrows exposed only to turbine noise outside the flicker boundary, and two control sites located well outside the wind farm. Comparing lizard responses across these settings allowed us to assess how both visual and noise disturbance each contribute to changes in predator detection and retreat behaviour.

3. Methods:

3.1. *Study species*

3.1.1. *Pygmy bluetongue*

The pygmy bluetongue lizard (*Tiliqua adelaidensis*) is a medium-sized, endangered skink endemic to fragmented native grassland habitats in South Australia's Mid North. Individuals are site-faithful and occupy vertical burrows constructed by mygalomorph and lycosid spiders, which serve as permanent refuge sites from predators and thermal extremes. Lizards are active at the burrow entrance during warmer months (October to April), spending time basking and surveying for prey and predators, and retreating rapidly into the burrow in response to perceived threat. Its restricted range, habitat specificity, and reliance on surface activity for thermoregulation make it particularly vulnerable to disturbances that alter predator detection or refuge use behaviour.

3.1.2. *Nankeen kestrel*

The nankeen Kestrel (*Falco cenchroides*) is a small native falcon widely distributed across mainland Australia and a natural predator of lizards, insects, and small mammals (Leach et al., 2015). They are regarded as a predator of *T. adelaidensis* and have been observed frequenting areas during lizard surveys and preying on lizards (Fenner et al., 2008; D.T and N.W, personal obs). As an aerial raptor that hunts by hovering and stooping, it represents an ecologically valid imitation of the aerial predation threat experienced by pygmy bluetongue lizards in the field. This approach builds on earlier work using static predator models with this species: cardboard cutouts of a flying falcon produced only weak and inconsistent effects on lizard basking behaviour in the field (Bennett, 2015), suggesting live, moving predator stimuli may better elicit a natural anti-predator response. A single trained individual, handled by experienced falconer (Martin Scuffins), was used across both trial rounds in November 2025 and March 2026 to ensure consistency of the predator stimulus. The same individual (Figure 1A) was used across both sampling periods, minimising variation in flight behaviour, speed, and approach angle between trials. Kestrels undergo primary moult between December and February, during which flight performance is reduced, and trials were therefore restricted to outside this period.

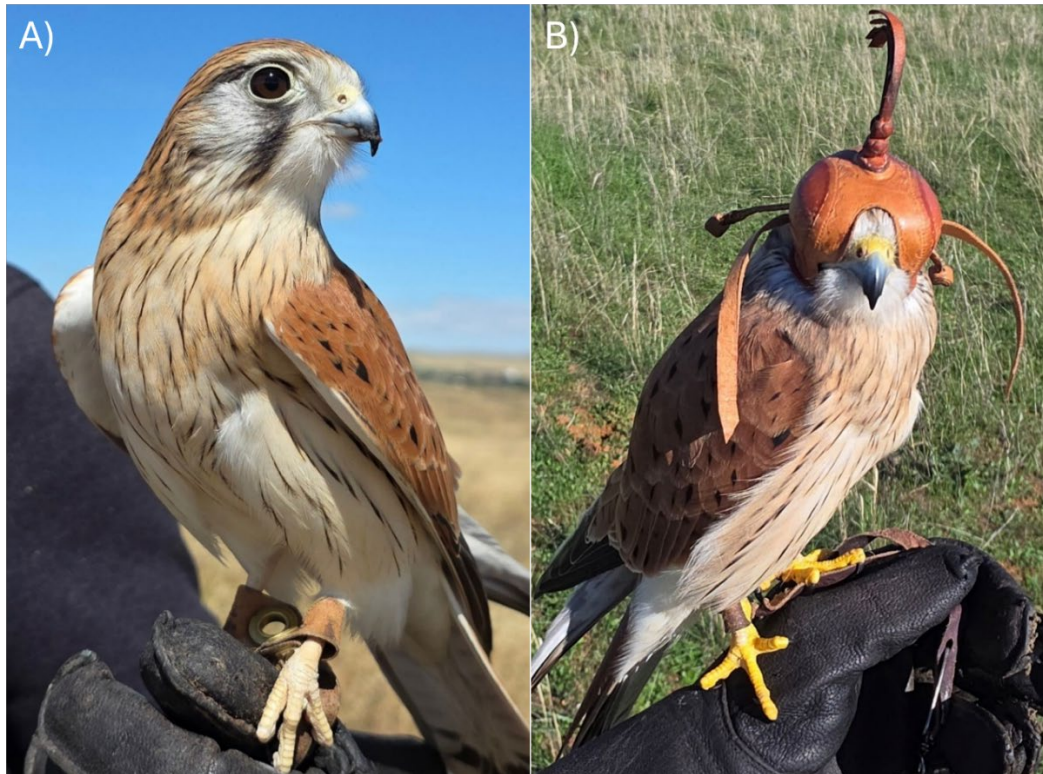
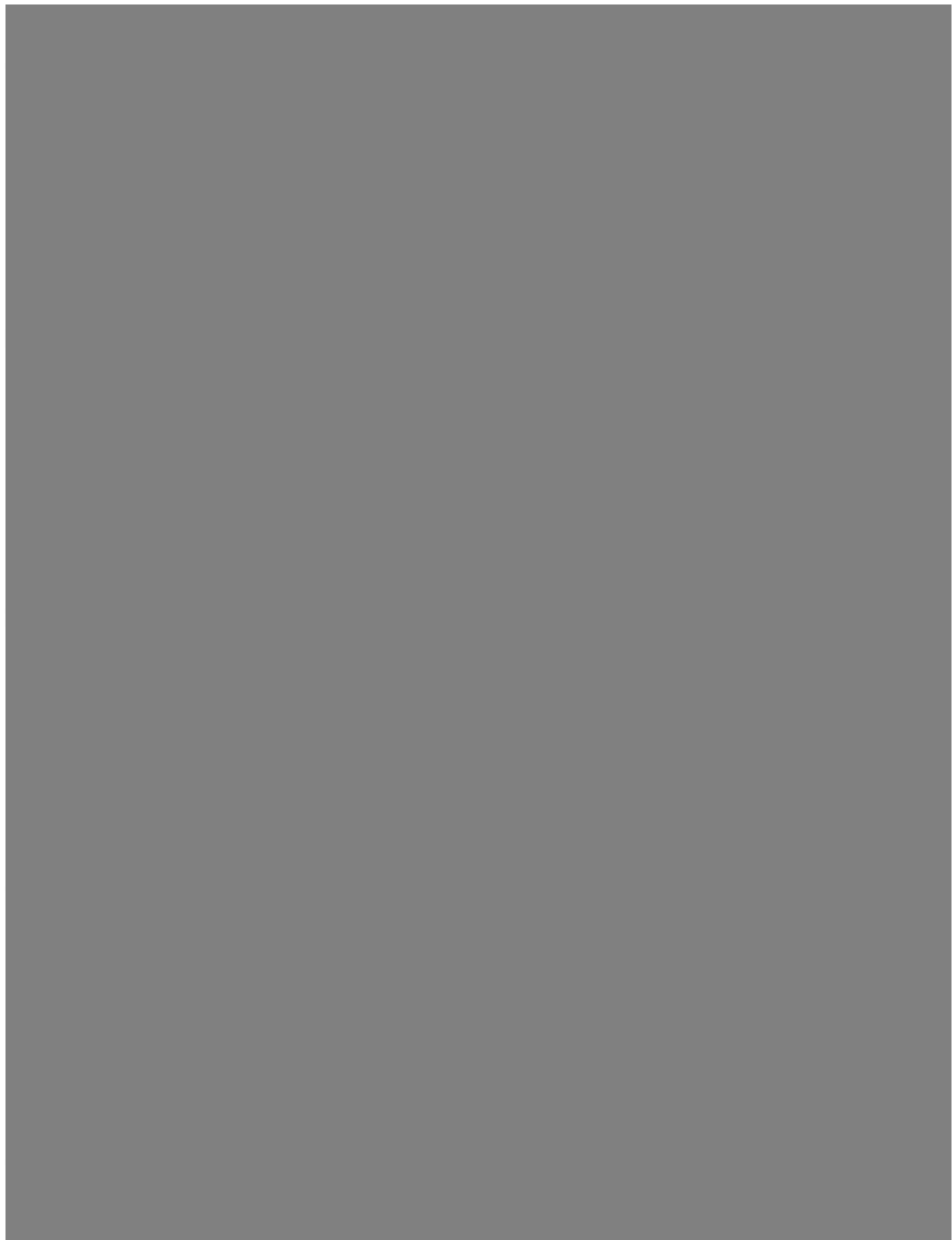


Figure 1. A) The trained nankeen kestrel (*Falco cenchroides*) used to simulate aerial predation of pygmy bluetongue lizards in field trials, B) The nankeen kestrel with the addition of falconry hood that was implemented prior to trials in March 2026.

3.2. Study sites

The study was conducted across four sites in South Australia's Mid North. Two turbine-associated sites were located at Goyder South Wind Farm adjacent to [REDACTED], and two control sites were located at [REDACTED], approximately 11km from the wind farm. At the turbine, Zone 1 comprised burrows located within the shadow flicker zone of [REDACTED] (75-250m away from turbine), and Zone 2 comprised burrows approximately 400 m southeast of the turbine, outside the shadow flicker boundary (Figure 2). Control sites comprised two zones approximately 1.4km apart within grassland habitat without wind turbine infrastructure (Figure 2). All sites were surveyed within an approximately 1 ha area. The internal Goyder South control site used in November 2025 was replaced in March 2026 after lizards were absent on resurvey; a new internal near turbine outside of flicker zone was established approximately 400 m southeast of [REDACTED].



Site type ● Control ● Windfarm

Figure 2. Location of pygmy bluetongue lizard study sites in the mid-north region of South Australia. Control sites (blue) are located at [REDACTED] and [REDACTED]. Windfarm sites (orange) are located within the Goyder South Wind Farm, split into a shadow flicker zone (Turbine flicker) and a zone outside shadow flicker (Turbine no flicker).

3.3. *Sampling design*

Data was collected across three sampling periods spanning the pygmy bluetongue activity season. Predation trials were conducted in November 2025 (pilot trials) and March 2026 (full replicate trials with refined methodology). An intermediate sampling period in December 2025 collected additional baseline behavioural footage and facilitated individual capture and marking but did not include predation trial. The November 2025 trials served as a pilot to develop and refine the predator simulation methodology, with minor methodological adjustments applied prior to the March 2026 trials.

3.4. *Animal detection and marking*

Occupied burrows were located at each site using established visual survey methods during site visits in November 2025 ($n = 27$ lizards across all sites) and March 2026 ($n = 40$ lizards across all sites). Following behavioural trials, the majority of individuals were captured for individual marking via toe clipping, morphometric measurement (mass and snout-vent length), and tissue sampling for genetic analysis. Given the species' site fidelity, individuals filmed at a given burrow are assumed to be largely the same individuals subsequently captured at that burrow; however, this cannot be confirmed, as identification is only possible upon capture.

3.5. *Baseline behavioural monitoring*

A field camera was deployed adjacent to each focal burrow at a height of 40 cm and positioned 1 m from the burrow entrance. Prior to any predation simulation, cameras recorded continuously for 3–4 days to capture baseline surface activity and basking behaviour. Additional baseline footage was collected across all sites in December 2025 without predation simulation, providing a third baseline sampling point between the two trial rounds. Baseline footage was scored to quantify the proportion of time lizards spent on the surface and engaged in different behaviour at turbine and control sites.

3.6. *Staged predation trials*

Predation by aerial raptors was staged using a trained nankeen Kestrel as described above. Trials were conducted by positioning the falconer (Martin Scuffins) and trained researcher (Dee Trewartha) on a pre-established transect, 8–10 m from the nearest focal burrow (or, where multiple burrows lay roughly in line, from the nearest end of the burrow line) at each end. The kestrel was flown directly along this transect, passing over each focal burrow at a height of approximately 50 cm above the burrow entrance. The kestrel did one pass per individual (burrow). The staged predation event was captured on the focal burrow camera. Following each trial, cameras continued recording for 1–2 days to capture post-trial behaviour including time to re-emerge. Trials were conducted between 24–26 March 2026 at [REDACTED] control sites ($n = 20$ individuals) and Goyder South sites ($n = 17$ individuals), and between 7th–10th November 2025 ($n = 17$ individuals). Trials were conducted throughout the day, dependent on both lizard activity and willingness of the predator to perform for a food reward, making it difficult to standardise timing across sites or periods

(Table S1). Trials of predation simulations on a focal burrow (or 2–3 adjacent focal burrows) were conducted back-to-back within a site, to maintain the kestrel's motivation for food reward. The falconer and secondary handler moved across the site in a way that maintained a distance of at least 10 m from each burrow and minimised disturbance to lizards (Figure 3).

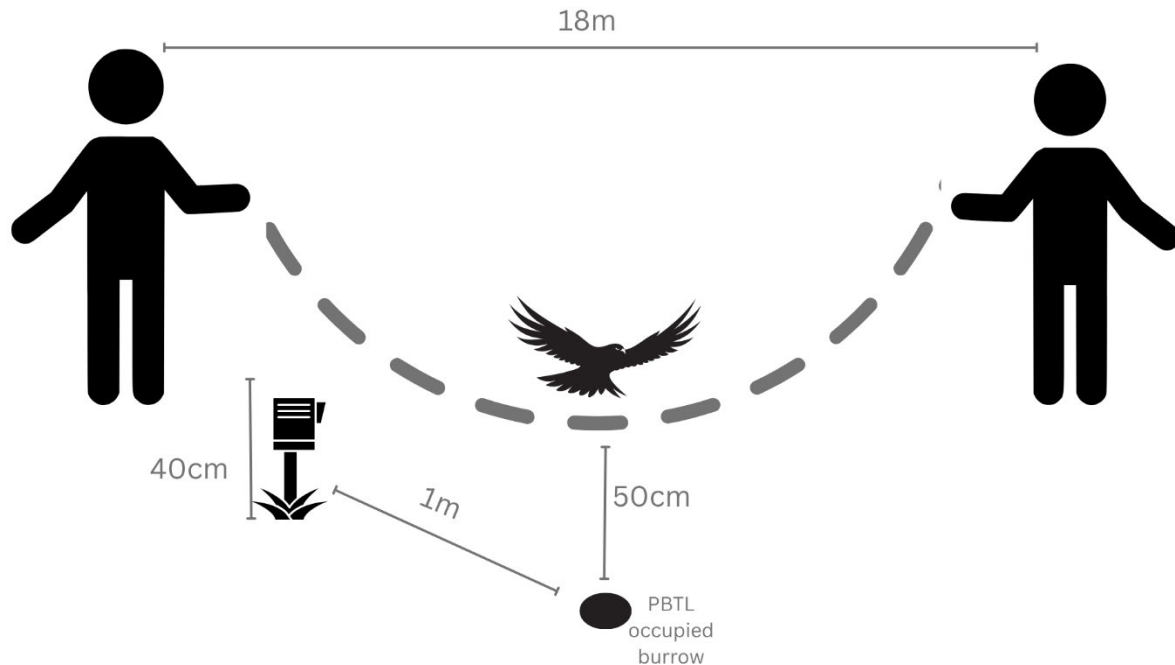


Figure 3. Schematic diagram of the staged predator trial and distances between researchers, camera and pygmy bluetongue burrow.

3.7. Protocol refinements

In November, during the pilot predation trial, the kestrel was flown shortly after (within 2 minutes) the falconer and trained secondary handler (researcher) took up their positions. To avoid lizard retreat being triggered by human approach rather than the flight itself, a standardised 15-minute settling period was introduced in March 2026, during which the falconer and researcher remained away from the lizard area, before approaching to begin each trial. The kestrel was also hooded prior to release in March 2026 (Figure 1B) to calm the bird between trials and reduce pre-flight vocalisation. A third change was the confirmation of lizard surface activity before flights: whereas activity in November was assessed retrospectively from footage, in March 2026 we made general checks with binoculars that lizards were visible at burrow entrances before releasing the kestrel, reducing the likelihood that trials were conducted while lizards were already underground. Finally, the transect distance between falconer and researcher was formalised at 18 m in March 2026 (based on known approach distance; Trewartha et al., 2025) and baseline filming was extended from 2–3 to 3–4 days.

3.8. Behavioural scoring

All footage was scored using Solomon Coder (Péter, 2017) by three trained observers. Prior to independent scoring, all observers completed a standardised training process using a subset

of videos. Observers scored training videos until reaching acceptable agreement with the reference scores. All observers completed the same training process before contributing to independent scoring of the dataset. Behaviours scored included basking behaviours, retreat, foraging and mating.

3.9. Analysis

All statistical analyses were conducted in R (version 4.5.2). We first characterised daily activity patterns of lizards using three metrics derived per burrow, per sampling period: 1) time of first emergence, 2) proportion of daily surface activity, and 3) time of peak activity. First emergence and peak activity time were square-root transformed to improve normality of model residuals prior to analysis, as both metrics are right-skewed due to occasional late-emerging individuals. Each metric was modelled using linear models with site and sampling period as fixed effects, compared using likelihood ratio tests. Where significant interactions were detected, pairwise period contrasts were obtained using Tukey-adjusted estimated marginal means. The same approach was applied to the proportion of the recording day spent on the surface. Basking exposure was quantified as the proportion of basking time spent fully emerged per burrow per sampling period. Because this measure is bounded between zero and one and many individuals never fully emerged, proportions were logit-transformed prior to analysis (values of 0 and 1 adjusted to 0.001 and 0.999 respectively) to meet the assumptions of linear models, with site and period effects evaluated using likelihood ratio tests and Kruskal-Wallis tests used for within-period comparisons.

Behaviour change rate was calculated as the number of transitions between any scored behavioural states per minute, independent of the kestrel trials, across each burrow's full recorded day. Rates were pooled across sampling periods to give one observation per burrow, and compared between sites using a Kruskal-Wallis test.

Predator trial responses were assessed using data from November 2025 and March 2026 pooled. Active status of the lizards at the moment of the kestrel flight was determined from the scored interval closest to the flight time, restricted to footage scored by the primary observer. The proportion of lizards active at the time of the flight and the proportion retreating within one minute were compared across sites using Fisher's exact tests, which are appropriate for small sample sizes and binary outcomes, with 95% Wilson confidence intervals calculated for all proportions. Reaction time and time to re-emergence after retreat were compared using Kruskal-Wallis tests, chosen because of the small sample sizes and non-normal distributions. Burrows with no valid trial footage, or where the kestrel landed on the camera post rather than completing a flight, were excluded. All burrows were treated as independent between the sampling periods. One burrow (NBS043) had a flight in both November and March, but the lizard was inactive on both occasions. As a result, this burrow's general behavioural activity data appears in both periods, but the burrow is excluded from the flight-response data.

The same measure of behaviour change rate (described above) was also calculated within 60-minute windows immediately before and after each kestrel flight. Burrows with fewer than 10

minutes of scored footage in either window were excluded. The effect of the flight on behaviour change rate was assessed using a linear mixed model with window (pre- vs post-flight), site, and their interaction as fixed effects, and burrow identity as a random intercept to account for the non-independence of repeated pre- and post-flight observations from the same individual. Model terms were evaluated using likelihood ratio tests, and within-site pre-versus post-flight differences were examined using paired Wilcoxon signed-rank tests, which are appropriate for small-paired samples.

4. Results

4.1. Lizard behaviour

4.1.1. Lizard surface activity

The proportion of the day spent on the surface did not differ significantly between sites ($p = 0.71$) or sampling periods ($p = 0.39$; Figure 4). Median daily surface activity ranged from 0.31 to 0.60 across all site-sampling period combinations, with high variability within sites in all periods. Lizards at all sites therefore spent a comparable proportion of the day on the surface, with wind turbine proximity having no detectable effect on overall surface activity.

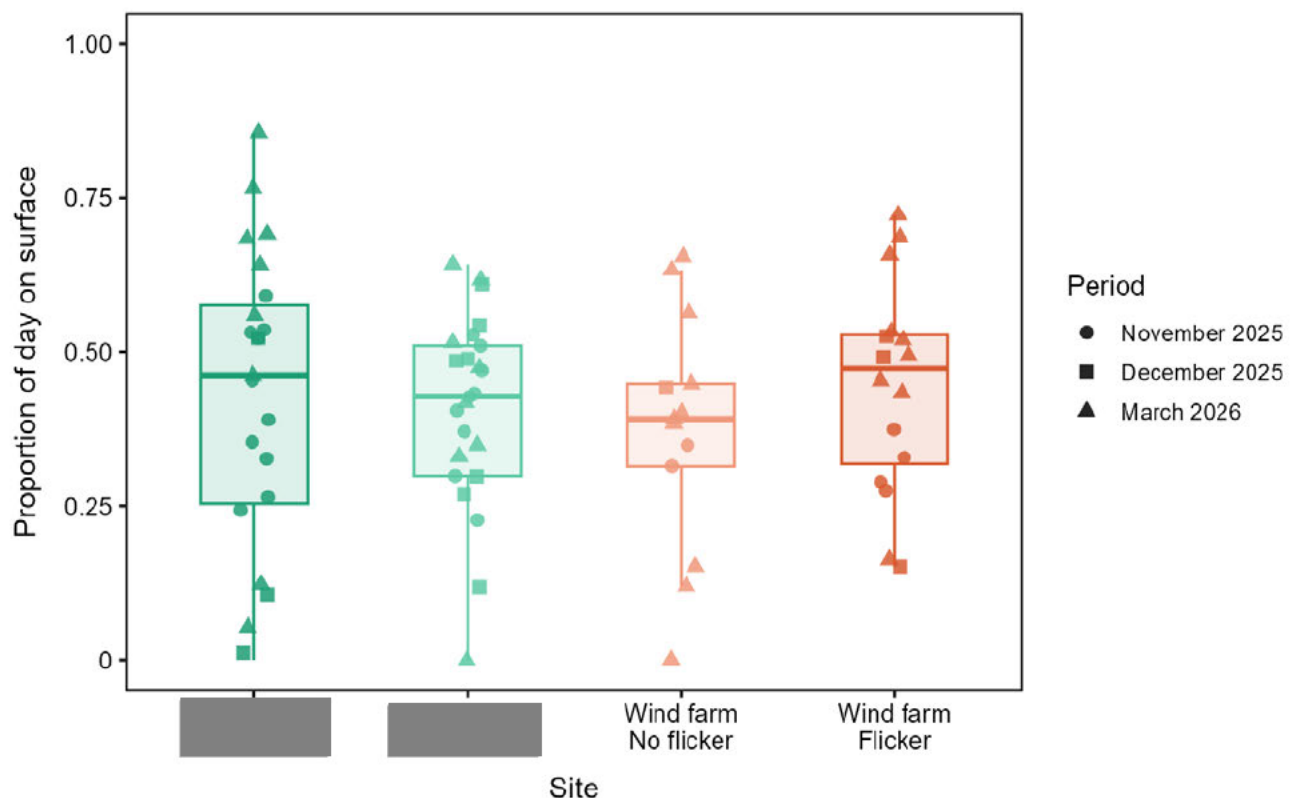


Figure 4. Proportion of the recording day spent on the surface by lizards at four sites ([redacted] and [redacted] (controls) and Wind farm flicker and Wind farm no flicker (turbine-associated sites) across three sampling periods (November and December 2025, March 2026). Each point represents one burrow. Boxes show median and interquartile range.

4.1.2. Daily lizard activity

Surface activity varied across the day at all sites and in all sampling periods (Figure 5). In November 2025 and March 2026, control sites (██████████ and ██████████) showed relatively consistent activity across the day, with lizards emerging in the morning and remaining moderately active through the afternoon. In contrast, lizards at the wind farm flicker site were largely inactive in the early morning and showed a delayed rise in activity, peaking around midday before declining. The wind farm no-flicker site showed an intermediate pattern, with activity rising later than controls but earlier than the flicker site.

In December 2025, all sites showed earlier and more front-loaded activity consistent with heat avoidance during the hottest part of the season (Figure 5).

Lizards at the wind farm flicker site emerged later than at control sites in both November ($p = 0.005$) and March ($p = 0.041$), with a median emergence around 9 am compared to 7–8 am at the other sites. This delay was clearest against the wind farm no-flicker site in March ($p = 0.017$). In December, all sites emerged within a narrow window before 8 am with no significant site differences, suggesting the strong seasonal pull toward early emergence overrode the site-level pattern seen in the other two periods (Figure 5). Peak activity followed a similar seasonal trend, occurring earliest in December and latest in November ($p = 0.003$).

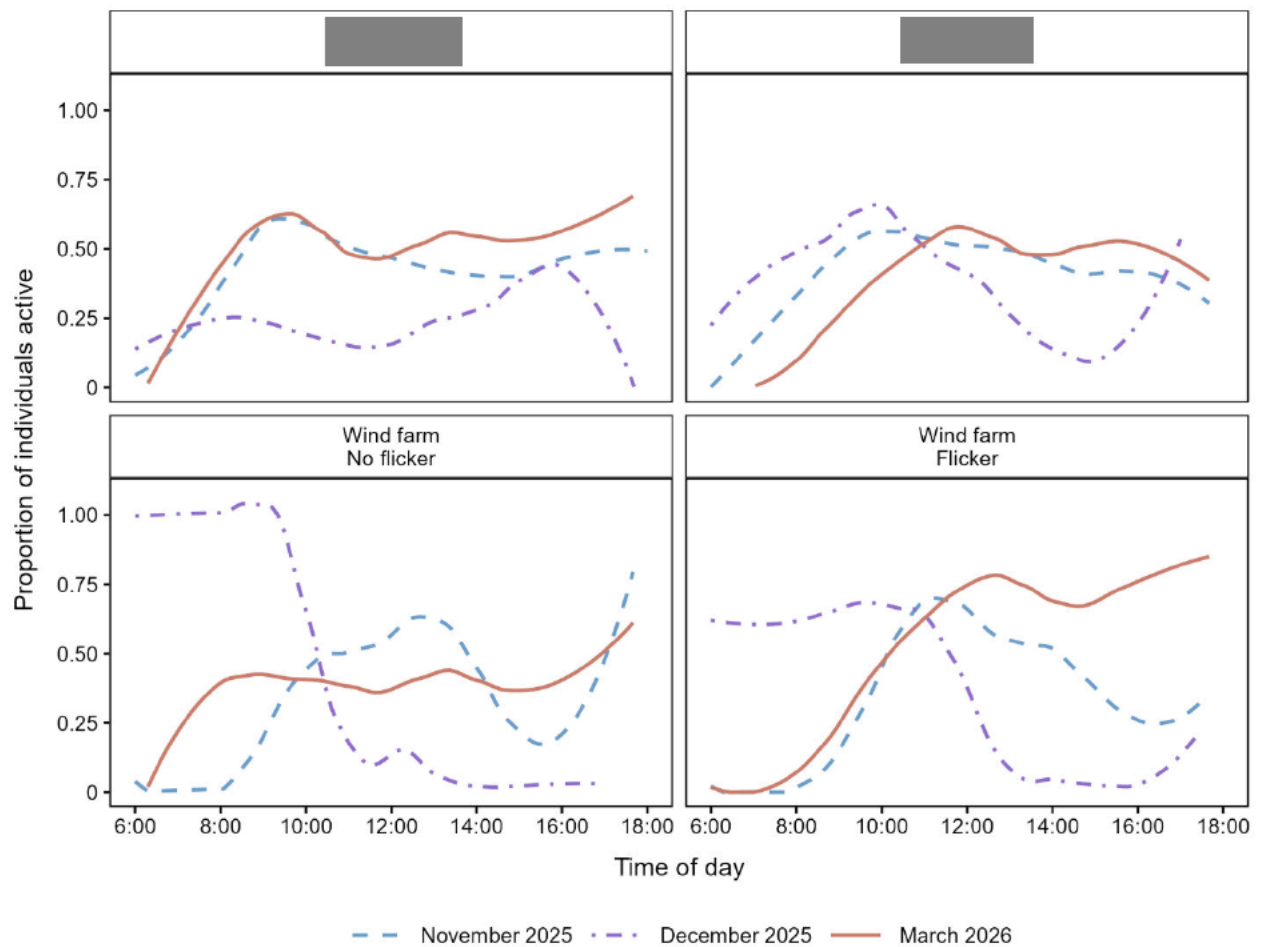


Figure 5. Daily surface activity patterns of pygmy bluetongue lizards across four sites ([redacted] and [redacted] (controls) and Wind farm flicker and Wind farm no flicker (turbine-associated sites) and three sampling periods (November 2025, December 2025, March 2026). Lines show the mean proportion of individuals active per 20-minute interval, smoothed using a LOESS curve.

4.1.3. Behavioural changes

[redacted] and Wind farm flicker showed the highest median rates of behaviour change (0.059 and 0.055 changes per minute respectively), while [redacted] and the wind farm no-flicker site were lower (0.043 and 0.038; Figure 6). This pattern was broadly consistent across sampling periods (Figure 6). However, the rate at which lizards transitioned between behavioural states did not differ significantly between sites overall (Kruskal-Wallis, $p = 0.57$).

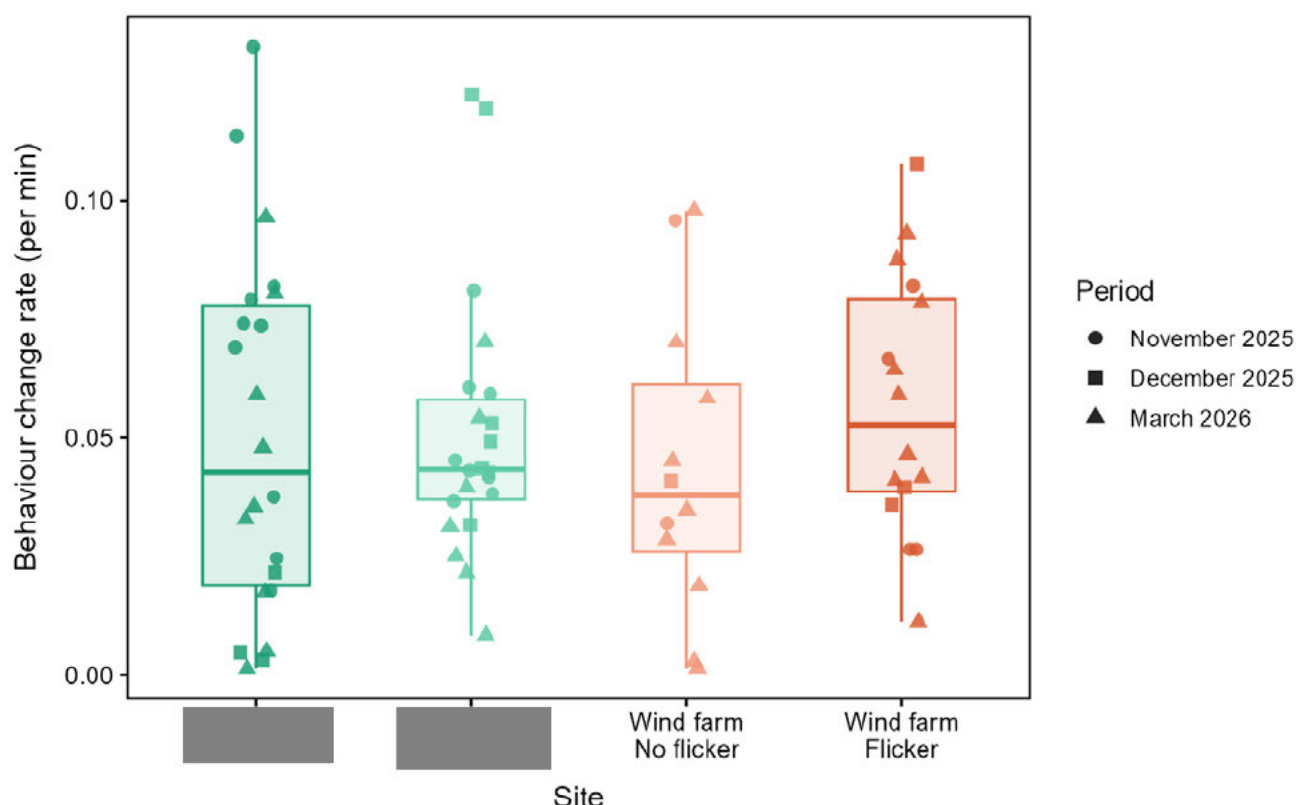


Figure 6. General behaviour change rate by site, independent of the predation trial. A behaviour change was defined as any transition between scored behavioural states across basking or non-basking categories. Boxes show the median and interquartile range of one rate per burrow, pooled across all sampling periods for that burrow; points show individual burrow-period observations, shaped by sampling period.

4.2. Anti-predator behaviours

4.2.1. Lizard activity during predation trial

The proportion of lizards active at the moment of the kestrel flight differed significantly between sites when data from both sampling periods were pooled (Fisher's exact test, $p = 0.046$). Lizards at the wind farm flicker site were active during the flight most frequently (7/12, 0.58), while [redacted] showed the lowest proportion active (1/11, 0.09). [redacted] showed an intermediate response (5/11, 0.45), and the wind farm no-flicker site had low activity at the time of the flight (1/7, 0.14) (Figure 7).

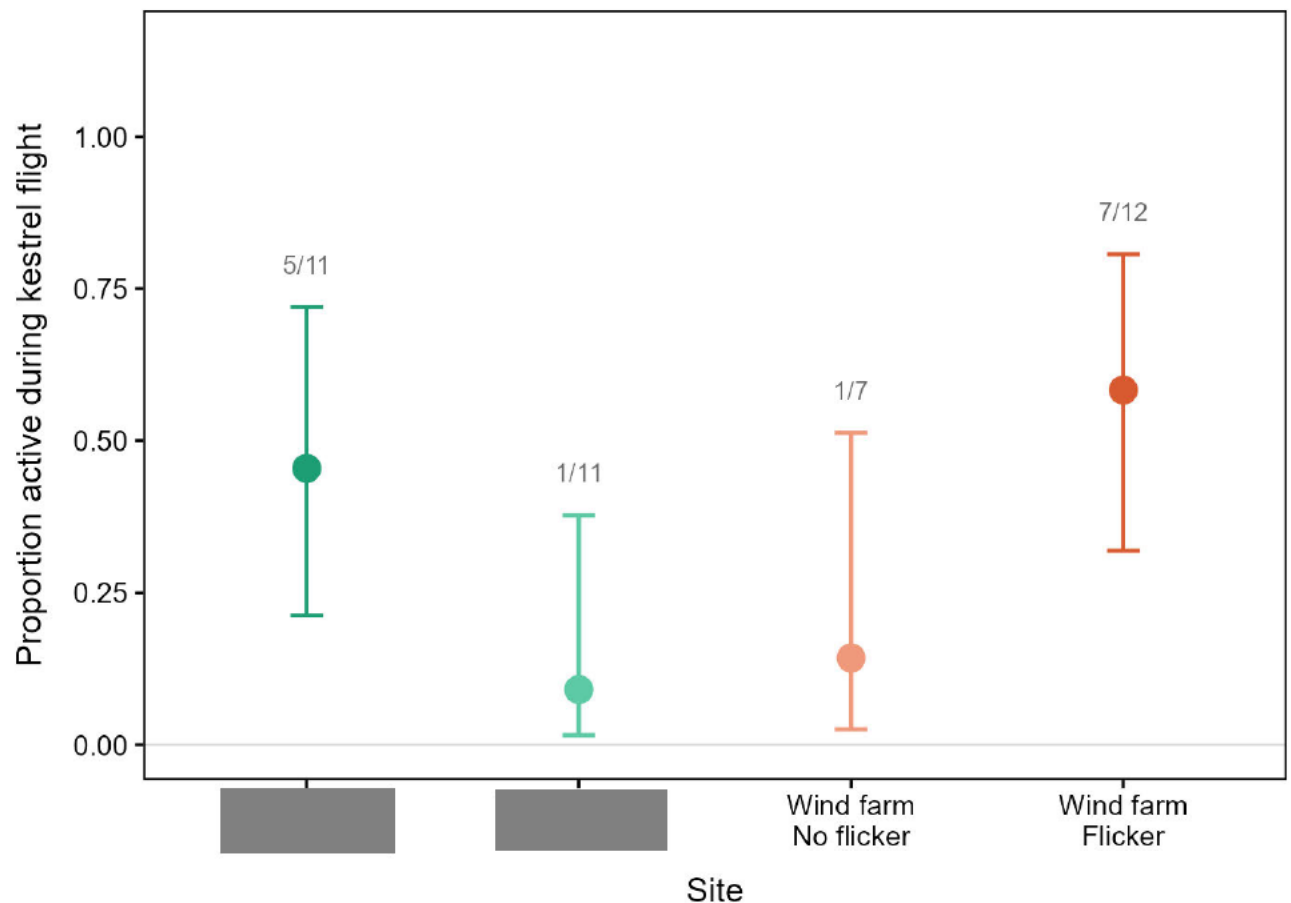


Figure 7. Proportion of lizards active at the moment of a staged nankeen kestrel flight, by site and sampling period. Points show the observed proportion; error bars show 95% Wilson confidence intervals. Numbers above each point indicate the count of active individuals out of the total number of trials at that site. Data from November 2025 and March 2026 sampling periods are pooled. Wind farm no-flicker site had no November trials.

4.2.2. Retreat behaviour

Among lizards that were active at the time of the flight, the proportion retreating into the burrow within one minute also differed significantly between sites (Fisher's exact test, $p = 0.014$). All seven active individuals at the wind farm flicker site retreated within one minute (7/7, 1.00), as did four of five at [redacted] (4/5, 0.80) (Figure 8). No individuals retreated within one minute at [redacted] (0/1) or the wind farm no-flicker site (0/1), though both represent small samples (Figure 8).

Reaction time among retreating individuals did not differ significantly between sites (Kruskal-Wallis, $p = 0.56$), with median reaction times of 0.6 minutes at both [redacted] and the wind farm flicker site (range 0.2–1.0 min) (Figure S2).

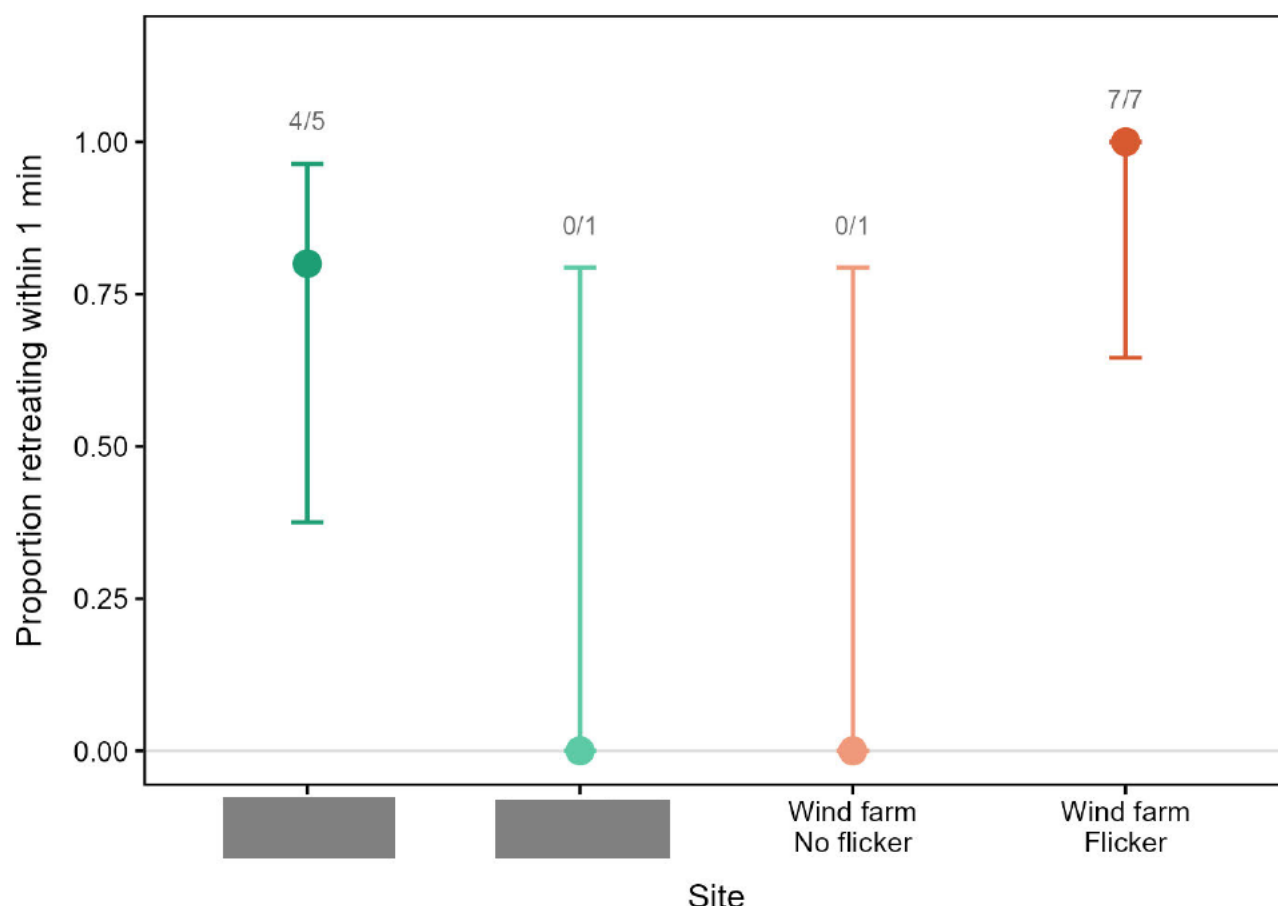


Figure 8. Proportion of lizards retreating into the burrow within one minute of a staged Nankeen Kestrel flight, among individuals that were active at the moment of the flight. Points show the observed proportion; error bars show 95% Wilson confidence intervals. Numbers above each point indicate the count of individuals retreating within one minute out of the total number of active individuals at that site. Data from November 2025 and March 2026 sampling periods are pooled.

4.2.3. Re-emergence following retreat

All eleven retreating individuals re-emerged from their burrow within the recording period. However, the time spent underground after retreating differed between sites. Lizards at [redacted] re-emerged rapidly, with a median of 0.9 minutes after retreating (range 0.2–5.0 min), while lizards at the wind farm flicker site remained underground for longer (median 2.2 min, range 0.2–12.0 min), though this difference was not statistically significant (Kruskal-Wallis, $p = 0.22$) (Figure 9). One individual (SG044035) recorded a markedly longer time than the rest (12.0 min), which had a disproportionate influence on the group median.

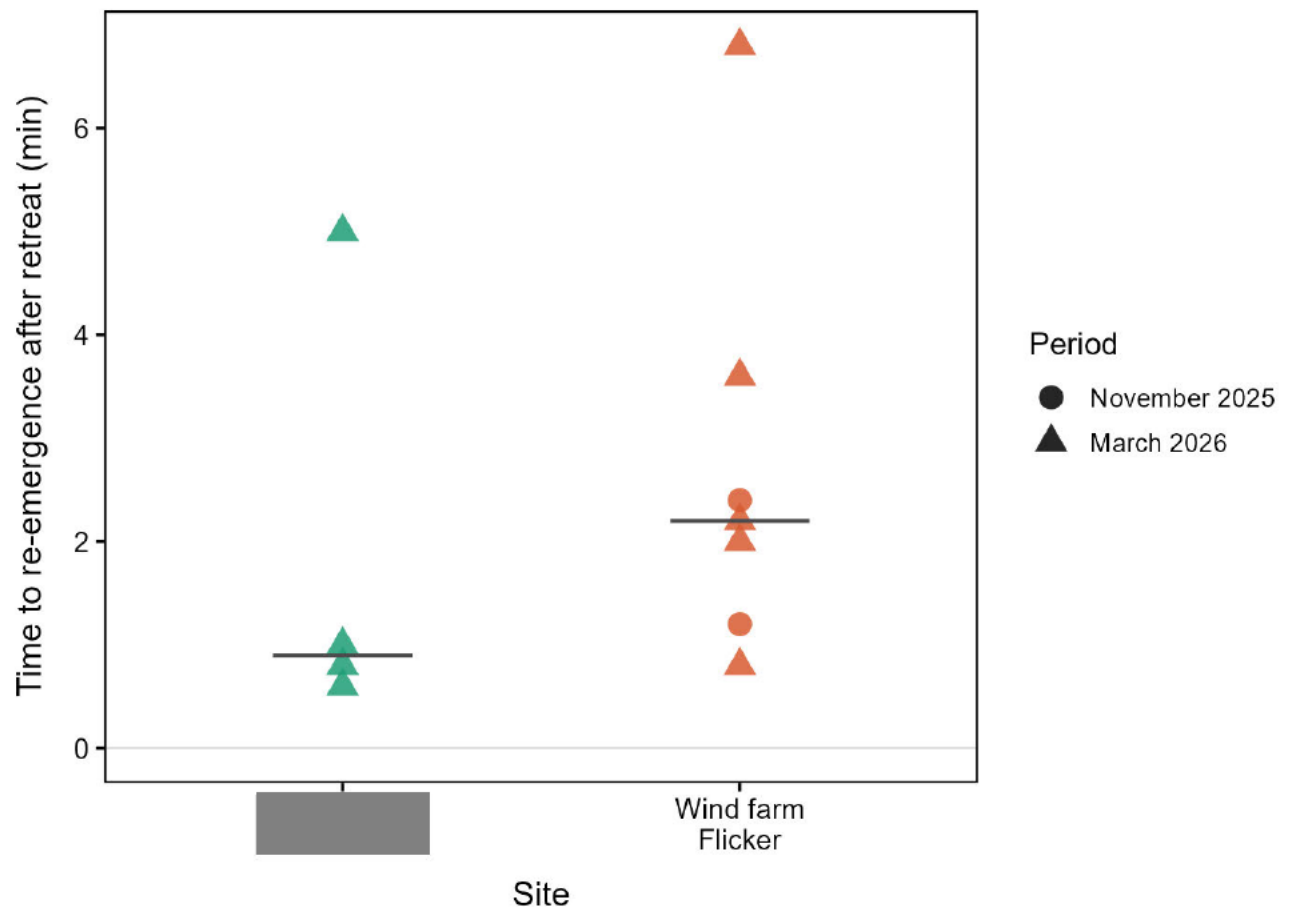


Figure 9. Time from retreat to re-emergence in lizards following retreat in response to a staged kestrel flight. Points show individual lizards; circles = November 2025, triangles = March 2026. The horizontal bar shows the median. Data from both sampling periods are pooled.

4.2.4. Behaviour changes after predator event

Behaviour change rate declined following the kestrel flight when data were pooled across all sites (LMM, $p = 0.093$; Figure 10). This decline was significant at [redacted] ($p = 0.022$), where median behaviour change rate dropped from 0.07 to 0.03 changes per minute, and approached significance at [redacted] ($p = 0.074$). In contrast, behaviour change rate did not change significantly at the wind farm flicker site ($p = 0.22$) or the wind farm no-flicker site ($p = 1.0$). The pre-to-post change did not differ significantly among sites ($p = 0.21$).

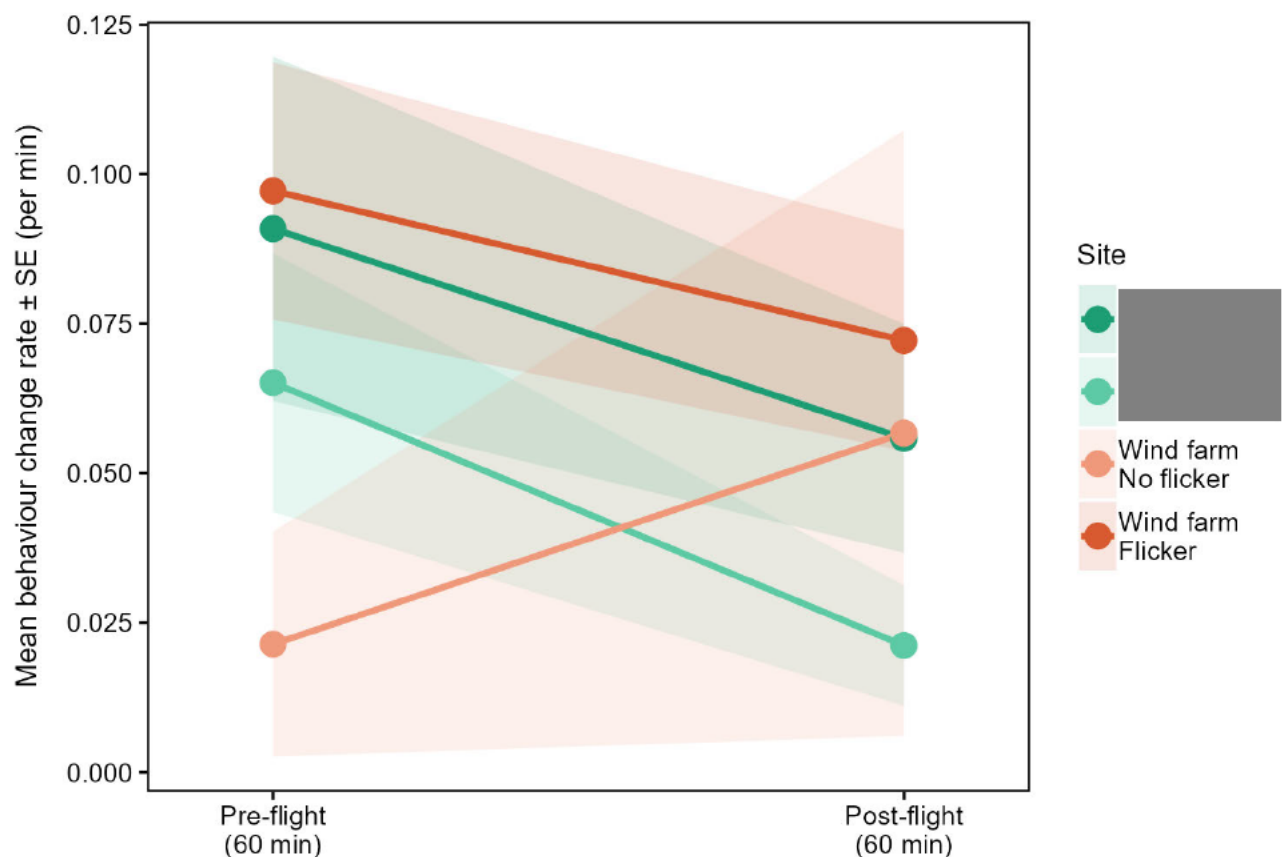


Figure 10. Mean behaviour change rate ($\pm$ SE) per minute in the 60-minute window before and after a staged Kestrel flight, by site. A behaviour change was defined as any transition between scored behavioural states across basking or non-basking categories. Data from November 2025 and March 2026 sampling periods are pooled. Lines connect pre- and post-flight means; shaded ribbons show $\pm$ 1 SE.

4.3. Other predation events

During filming, brown snakes (*Pseudonaja textilis*) were recorded at burrows on eleven occasions across the study, at both the Burra and Goyder South sites, in November 2025, December 2025, and March 2026 (example: Figure 11). Most sightings were brief, with snakes passing over or investigating burrow entrances without entering. On 25 March 2026, a single snake was tracked moving sequentially through four adjacent burrows at the Goyder South wind farm no flicker site over approximately 80 minutes, entering one burrow directly. Brown snakes are a known predator of pygmy bluetongue lizards (Ebrahimi et al., 2015), and these observations indicate ongoing predation pressure from this species across both control and wind farm sites. This site (wind farm, no flicker) had the highest recorded incidence of snakes, with six different videos documenting snakes at this site.



Figure 11. Brown snake recorded at [REDACTED] on the morning of 10 December 2025. (A) Snake at burrow BUSC110, 06:00. (B) Snake at burrow BUSC105, 06:04.

5. Discussion

Our study found that proximity to wind turbine disturbance altered the timing and general pattern of pygmy bluetongue activity. Lizards at the wind farm flicker site emerged later and showed a delayed rise in daily activity compared to control sites, consistent with shadow flicker disrupting the cues lizards use to time emergence. Behaviour change rates were also higher at this site, a pattern explored further below. Despite this, flicker-site lizards were the most likely to be active during the staged kestrel flight, and all active individuals retreated within one minute, with reaction times matching those recorded at [REDACTED] (a control site). Disturbance therefore altered the timing of activity without impairing the capacity to detect and respond to a predator.

The delayed emergence and shifted peak activity at the flicker site may reflect disruption to the light cues lizards use to time their activity. Reptile circadian rhythm is set primarily by light, and secondarily by temperature (Mancera & Phillips, 2023; Oishi et al., 2004). Timing of activity is critical for fitness: light not only synchronises circadian rhythm but also directly influences behaviours such as alertness, locomotion, body temperature, and heart rate (Bidell et al., 2024; Rangel et al., 2025). Even brief light pulses can shift the timing of activity in other taxa, such as rodents (Flôres et al., 2016). Shadow flicker creates a rapid, repeated interruption to natural light patterns at the burrow, and could act as an unusual light cue disrupting this timing (Rangel et al., 2025). No studies have directly tested this pathway.

Beyond emergence timing, the flicker site had the highest pre-flight behaviour change rate of any site (median 0.10 changes per minute), falling after the flight (median 0.05), though this decline did not reach significance (Wilcoxon signed-rank test, $p = 0.221$). This suggests a more restless baseline state at this site, leaving less room for a further drop once the kestrel flew. Lizards at the flicker site also remained underground longer after retreating (median 2.2 min) than lizards at [REDACTED] (median 0.9 min), despite showing no reduction in

activity or reaction time during the flight itself. Similar patterns occur in pygmy bluetongues responding to snakes (Daniell et al., 2021), and captive pygmy bluetongues have been shown to reduce basking more than wild individuals in response to simulated avian predators, reflecting a pattern in which wild lizards trade off predator avoidance against foraging and mating opportunity (Bennett, 2015). In other refuge-using lizards, individuals in poorer body condition spend less time hidden after a predator attack than those in better condition, suggesting refuge use is balanced against energetic need rather than driven by risk alone (Amo et al., 2007; Martín & López, 1999), supporting basking as a trade-off behaviour rather than one abandoned under risk (Iglesias-Carrasco et al., 2016; Martín & López, 1999; Pérez-Tris et al., 2004). Turbine disturbance may therefore shift the form of the anti-predator response, extending caution after retreat without reducing responsiveness.

The pattern at the wind farm no-flicker site is harder to interpret, and may not be an absent anti-predator response. Lizards here showed the lowest activity during the kestrel flight of any site, and behaviour change rate showed no measurable change in either direction around the flight (Wilcoxon signed-rank test, $p = 1.0$). This site also recorded the highest brown snake activity, including a prolonged predation event. Elevated real predation pressure by snakes at this site may have driven lizards toward greater baseline caution, spending less time active on the surface and more time retreated regardless of the staged kestrel flight. Pygmy bluetongues are known to respond to snake scent cues in the wild (Daniell et al., 2021), so chemical cues may be a more salient predator signal here than the kestrel's visual cue, particularly if brown snakes are the dominant threat at this site. Pygmy bluetongues have also been documented retreating for as long as two hours following a snake encounter (Ebrahimi et al., 2015), far longer than any retreat duration observed here in response to the kestrel (up to 2.2 minutes at the flicker site). This difference may reflect a genuinely stronger response to snake predators specifically, consistent with snakes posing a more direct and immediate threat to a burrow-dwelling species than an aerial predator. A strong response to snakes has been shown by rock-dwelling velvet geckos that will risk the trade-off of optimal temperature in the presence of snake cue scent (Downes & Shine, 1998). Both turbine exposure and snake activity co-occurred at the non-shadow flicker turbine site we investigated, so these explanations cannot be disentangled with the current design, but low measured activity at a single trial moment should not be read as evidence of reduced vigilance. Since brown snakes were also active at these sites throughout the study, a staged ground-predator trial alongside the aerial kestrel trial would give a fuller picture of how turbine disturbance affects anti-predator behaviour across predator types, rather than for aerial threats alone.

In contrast, the control sites showed a clearer freeze response. Behaviour change rate dropped sharply after the flight at both control sites, reaching significance at [REDACTED] ($p = 0.022$) and approaching significance at [REDACTED] ($p = 0.074$), indicative of a brief freeze followed by a rapid return to activity (median re-emergence of 0.9 min at [REDACTED]). Anti-predator behaviour therefore persisted across all four sites, but was expressed through different measures and with different consistency depending on local disturbance and predation conditions: an acute freeze at the control sites, prolonged caution at the flicker site,

and a pattern at the no-flicker site potentially reflecting chronic caution from snake predation pressure.

Despite these disturbance-associated differences in timing and general activity, pygmy bluetongues retained an appropriate anti-predator response at every site, indicating some behavioural flexibility that may buffer against disturbance effects. However, behavioural flexibility does not imply resilience. If disturbance-driven behavioural shifts impose energetic or thermoregulatory costs, or if altered cue prioritisation reduces responsiveness to certain predator types, plasticity may only partially compensate for environmental change. Long-term monitoring would be required to determine whether these behavioural adjustments are adaptive, neutral, or maladaptive in the context of wind farm expansion.

Our findings have practical implications for wind farm planning in pygmy bluetongue habitat. Because timing was affected without a corresponding loss of predator responsiveness, management attention should focus on the consequences of that timing shift rather than assuming reduced anti-predator ability. A later, more compressed activity window could still carry costs, such as reduced foraging time or exposure to different conditions than a natural schedule would allow. Given the species' endangered status and reliance on a limited number of burrows, even small shifts in daily activity warrant consideration in impact assessments for wind farms within its range. Turbine placement, shadow flicker mitigation, and ongoing monitoring near wind farms would help determine whether these timing shifts affect lizards over the longer term.

References:

- Amo, L., López, P., & Martín, J. (2007). Refuge use: a conflict between avoiding predation and losing mass in lizards. *Physiology & Behavior*, 90(2-3), 334-343.
- Amo, L., López, P., & Martín, J. (2004). Wall lizards combine chemical and visual cues of ambush snake predators to avoid overestimating risk inside refuges. *Animal Behaviour*, 67(4), 647-653.
- Bennett, K. (2015). *The impact of avian predation on pygmy bluetongue lizards (Tiliqua adelaidensis)* [Honours thesis, Flinders University].
- Bidell, D., Feige, N.-D., Triphan, T., Müller, C., Pauls, D., Helfrich-Förster, C., & Selcho, M. (2024). Photoreceptors for immediate effects of light on circadian behavior. *Isience*, 27(6).
- Buxton, R. T., McKenna, M. F., Mennitt, D., Fristrup, K., Crooks, K., Angeloni, L., & Wittemyer, G. (2017). Noise pollution is pervasive in US protected areas. *Science*, 356(6337), 531-533.
- Clayton, J., & Bull, C. (2015). The impact of sheep grazing on burrows for pygmy bluetongue lizards and on burrow digging spiders. *Journal of Zoology*, 297(1), 44-53.
- Clayton, J., & Bull, M. (2017). The impact of sheep grazing on the depth of spider burrows and of burrows selected by the pygmy bluetongue lizard (*Tiliqua adelaidensis*). *Wildlife Research*, 43(8), 691-703.
- Clayton, J., Gardner, M. G., Fenner, A. L., & Bull, M. (2020). Co-occupancy of spider-engineered burrows within a grassland community changes temporally. *Austral Ecology*, 45(4), 454-459.
- Creel, S., Dröge, E., M'soka, J., Smit, D., Becker, M., Christianson, D., & Schuette, P. (2017). The relationship between direct predation and antipredator responses: a test with multiple predators and multiple prey. *Ecology*, 98(8), 2081-2092.
- Crowe-Riddell, J. M., & Lillywhite, H. B. (2023). Sensory systems. In *Health and welfare of captive reptiles* (pp. 45-91). Springer.
- Daniell, T. L., Hutchinson, M. N., Ainsley, P., & Gardner, M. G. (2021). Recognition of reptile predator scent is innate in an endangered lizard species. *Australian Journal of Zoology*, 68(2), 76-84.
- de Oliveira, R. F., de Araujo Lira, A. F., Zaffaroni-Caorsi, V., Feitosa, M. L. B., & de Moura, G. J. B. (2025). Wind farm noise negatively impacts the calling behavior of three frogs in Caatinga dry forests. *PLoS One*, 20(3), e0318517.
- Doherty, T. S., Balouch, S., Bell, K., Burns, T. J., Feldman, A., Fist, C., Garvey, T. F., Jessop, T. S., Meiri, S., & Driscoll, D. A. (2020). Reptile responses to anthropogenic habitat modification: A global meta-analysis. *Global Ecology and Biogeography*, 29(7), 1265-1279.
- Downes, S., & Shine, R. (1998). Sedentary snakes and gullible geckos: predator-prey coevolution in nocturnal rock-dwelling reptiles. *Animal Behaviour*, 55(5), 1373-1385.
- Ebrahimi, M., Godfrey, S. S., Fenner, A. L., & Bull, C. M. (2015). Interactions between pygmy bluetongue lizards and co-existing species. *Transactions of the Royal Society of South Australia*, 139(2), 145-151.
- Fellows, H., Fenner, A., & Bull, C. (2009). Spiders provide important resources for an endangered lizard. *Journal of Zoology*, 279(2), 156-163.
- Fenner, A. L., Bull, C. M., & Hutchinson, M. N. (2008). Injuries to lizards: conservation implications for the endangered pygmy bluetongue lizard (*Tiliqua adelaidensis*). *Wildlife Research*, 35(2), 158-161.

- Fernández-Mellado, R., & EL, G. D. L. M. (2023). Wind Farm Impacts on Birds and Bats: Planning, Baseline Studies, Mitigation and Monitoring Overview. *Пернатые хищники и их охрана*(S2), 434-435.
- Flôres, D. E., Jannetti, M. G., Valentinuzzi, V. S., & Oda, G. A. (2016). Entrainment of circadian rhythms to irregular light/dark cycles: a subterranean perspective. *Scientific reports*, 6(1), 34264.
- Fordham, D. A., Watts, M. J., Delean, S., Brook, B. W., Heard, L. M., & Bull, C. (2012). Managed relocation as an adaptation strategy for mitigating climate change threats to the persistence of an endangered lizard. *Global change biology*, 18(9), 2743-2755.
- Geffroy, B., Sadoul, B., Putman, B. J., Berger-Tal, O., Garamszegi, L. Z., Møller, A. P., & Blumstein, D. T. (2020). Evolutionary dynamics in the Anthropocene: Life history and intensity of human contact shape antipredator responses. *PLoS biology*, 18(9), e3000818.
- Gémard, C., Duriez, O., Chappe, O., Duclos, G., & Besnard, A. (2025). Towards a better understanding of avian collision in wind energy facilities using automatic detection systems. *Journal of Applied Ecology*, 62(6), 1437-1448.
- Gómez-Catasús, J., Barrero, A., Llusia, D., Iglesias-Merchan, C., & Traba, J. (2022). Wind farm noise shifts vocalizations of a threatened shrub-steppe passerine. *Environmental Pollution*, 303, 119144.
- Head, M. L., Keogh, J. S., & Doughty, P. (2002). Experimental evidence of an age-specific shift in chemical detection of predators in a lizard. *Journal of Chemical Ecology*, 28(3), 541-554.
- Iglesias-Carrasco, M., Head, M. L., & Cabido, C. (2016). Habitat dependent effects of experimental immune challenge on lizard anti-predator responses. *Behavioral Ecology and Sociobiology*, 70(11), 1931-1939.
- Jonasson, K. A., Adams, A. M., Brokaw, A. F., Whitby, M. D., O'Mara, M. T., & Frick, W. F. (2024). A multisensory approach to understanding bat responses to wind energy developments. *Mammal Review*, 54(3), 229-242.
- Josimović, B., Bezbradica, L., Manić, B., Srnić, D., & Srebrić, N. (2023). Cumulative impact of wind farm noise. *Applied Sciences*, 13(15), 8792.
- Keehn, J. E., & Feldman, C. R. (2018a). Disturbance affects biotic community composition at desert wind farms. *Wildlife Research*, 45(5), 383-396.
- Keehn, J. E., & Feldman, C. R. (2018b). Predator attack rates and antipredator behavior of side-blotched lizards (*Uta stansburiana*) at Southern California wind farms, USA. *Herpetological Conservation and Biology*, 13(1), 194-204.
- Kight, C. R., & Swaddle, J. P. (2011). How and why environmental noise impacts animals: an integrative, mechanistic review. *Ecology letters*, 14(10), 1052-1061.
- Kikuchi, R. (2008). Adverse impacts of wind power generation on collision behaviour of birds and anti-predator behaviour of squirrels. *Journal for Nature Conservation*, 16(1), 44-55.
- Kumar, Y., Ringenberg, J., Depuru, S. S., Devabhaktuni, V. K., Lee, J. W., Nikolaidis, E., Andersen, B., & Afjeh, A. (2016). Wind energy: Trends and enabling technologies. *Renewable and Sustainable Energy Reviews*, 53, 209-224.
- Kumara, H. N., Babu, S., Rao, G. B., Mahato, S., Bhattacharya, M., Rao, N. V. R., Tamiliniyan, D., Parengal, H., Deepak, D., & Balakrishnan, A. (2022). Responses of birds and mammals to long-established wind farms in India. *Scientific reports*, 12(1), 1339.
- Leach, E., Jones, D., McBroom, J., & Appleby, R. (2015). Diet of Nankeen Kestrels' *Falco cenchroides* at Brisbane airport. *Australian Field Ornithology*, 32(1), 15-25.

- Lehnardt, Y., Barber, J. R., & Berger-Tal, O. (2024). Effects of wind turbine noise on songbird behavior during nonbreeding season. *Conservation Biology*, 38(2), e14188.
- Lehnardt, Y., Klein, T., Barber, J. R., & Berger-Tal, O. (2025). Wind turbine noise pollution reduces songbird vocal presence through changes in abundance. *Environmental Science and Pollution Research*, 32(17), 11214-11227.
- Lima, S. L., & Dill, L. M. (1990). Behavioral decisions made under the risk of predation: a review and prospectus. *Canadian journal of zoology*, 68(4), 619-640.
- Madsen, J., & Boertmann, D. (2008). Animal behavioral adaptation to changing landscapes: spring-staging geese habituate to wind farms. *Landscape ecology*, 23(9), 1007-1011.
- Madsen, P. T., Wahlberg, M., Tougaard, J., Lucke, K., & Tyack, P. (2006). Wind turbine underwater noise and marine mammals: implications of current knowledge and data needs. *Marine ecology progress series*, 309, 279-295.
- Mancera, K. F., & Phillips, C. J. (2023). Effects of noise and light. In *Health and welfare of captive reptiles* (pp. 357-378). Springer.
- Marques, A. T., Batalha, H., & Bernardino, J. (2021). Bird displacement by wind turbines: Assessing current knowledge and recommendations for future studies. *Birds*, 2(4), 460-475.
- Martín, J., & López, P. (1999). An experimental test of the costs of antipredatory refuge use in the wall lizard, *Podarcis muralis*. *Oikos*, 499-505.
- Matyjasiak, P., Chacińska, P., & Książka, P. (2024). Anthropogenic noise interacts with the predation risk assessment in a free-ranging bird. *Current Zoology*, 70(3), 277-283.
- Milne, T., Bull, C. M., & Hutchinson, M. N. (2003). Use of burrows by the endangered pygmy blue-tongue lizard, *Tiliqua adelaidensis* (Scincidae). *Wildlife Research*, 30(5), 523-528.
- Moore, D., Stow, A., & Kearney, M. R. (2018). Under the weather?—The direct effects of climate warming on a threatened desert lizard are mediated by their activity phase and burrow system. *Journal of Animal Ecology*, 87(3), 660-671.
- Nazir, M. S., Ali, N., Bilal, M., & Iqbal, H. M. (2020). Potential environmental impacts of wind energy development: A global perspective. *Current Opinion in Environmental Science & Health*, 13, 85-90.
- Nielsen, T. P., Ebrahimi, M., & Bull, C. M. (2016). A thirsty little lizard: drinking by the pygmy bluetongue lizard. *Transactions of the Royal Society of South Australia*, 140(1), 1-6.
- Oishi, T., Nagai, K., Harada, Y., Naruse, M., Ohtani, M., Kawano, E., & Tamotsu, S. (2004). Circadian rhythms in amphibians and reptiles: ecological implications. *Biological Rhythm Research*, 35(1-2), 105-120.
- Park, J.-K., & Do, Y. (2022). Wind turbine noise behaviorally and physiologically changes male frogs. *Biology*, 11(4), 516.
- Pérez-Tris, J., Díaz, J. A., & Tellería, J. L. (2004). Loss of body mass under predation risk: cost of antipredatory behaviour or adaptive fit-for-escape? *Animal Behaviour*, 67(3), 511-521.
- Péter, A. (2017). *Solomon coder* In <https://solomoncoder.com>
- Pettigrew, M., & Bull, C. M. (2011). The impact of heavy grazing on burrow choice in the pygmy bluetongue lizard, *Tiliqua adelaidensis*. *Wildlife Research*, 38(4), 299-306.
- Rabin, L. A., Coss, R. G., & Owings, D. H. (2006). The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*). *Biological Conservation*, 131(3), 410-420.

- Rangel, E. D., Moeller, C. A., Ayala, R. A., Henke, S. E., Wester, D. B., & Eversole, C. B. (2025). Adaptive Emergence Patterns of Spot-Tailed Earless Lizards: Influence of UV Light and Temperature on Diel Activity. *Ecology and Evolution*, 15(7), e71814.
- Recio, P., Rodríguez-Ruiz, G., & Martín, J. (2020). Effects of sensory mode in prey discrimination and predatory behaviour of rock lizards. *Amphibia-Reptilia*, 42(1), 125-132.
- Sander, L., Jung, C., & Schindler, D. (2024). Global review on environmental impacts of onshore wind energy in the field of tension between human societies and natural systems. *Energies*, 17(13), 3098.
- Schöll, E. M., & Nopp-Mayr, U. (2021). Impact of wind power plants on mammalian and avian wildlife species in shrub-and woodlands. *Biological Conservation*, 256, 109037.
- Schuster, E., Bulling, L., & Köppel, J. (2015). Consolidating the state of knowledge: a synoptical review of wind energy’s wildlife effects. *Environmental management*, 56(2), 300-331.
- Shannon, G., Angeloni, L. M., Wittemyer, G., Fristrup, K. M., & Crooks, K. R. (2014). Road traffic noise modifies behaviour of a keystone species. *Animal Behaviour*, 94, 135-141.
- Shea, G. M. (1992). *The systematics and reproduction of bluetongue lizards of the genus Tiliqua (Squamata: Scincidae)*
- Skarin, A., Sandström, P., & Alam, M. (2018). Out of sight of wind turbines—Reindeer response to wind farms in operation. *Ecology and Evolution*, 8(19), 9906-9919.
- Souter, N. J., Bull, C. M., Lethbridge, M. R., & Hutchinson, M. N. (2007). Habitat requirements of the endangered pygmy bluetongue lizard, *Tiliqua adelaidensis*. *Biological Conservation*, 135(1), 33-45.
- Tan, W., Herrel, A., & Rödder, D. (2023). A global analysis of habitat fragmentation research in reptiles and amphibians: what have we done so far? *Biodiversity and Conservation*, 32(2), 439-468.
- Taubmann, J., Kämmerle, J. L., Andrén, H., Braunisch, V., Storch, I., Fiedler, W., Suchant, R., & Coppes, J. (2021). Wind energy facilities affect resource selection of capercaillie *Tetrao urogallus*. *Wildlife Biology*, 2021(1), 1-13.
- Teff-Seker, Y., Berger-Tal, O., Lehnardt, Y., & Teschner, N. (2022). Noise pollution from wind turbines and its effects on wildlife: A cross-national analysis of current policies and planning regulations. *Renewable and Sustainable Energy Reviews*, 168, 112801.
- Tollrian, R., & Harvell, C. D. (1999). The evolution of inducible defenses: current ideas. *The ecology and evolution of inducible defenses*, 306, 321.
- Tolvanen, A., Routavaara, H., Jokikokko, M., & Rana, P. (2023). How far are birds, bats, and terrestrial mammals displaced from onshore wind power development?—A systematic review. *Biological Conservation*, 288, 110382.
- Trewartha, D., Clayton, J., Godfrey, S., & Gardner, M. (2025). Heat, water and reptiles—do the hydro-thermal properties of animals at the source location persist at the translocation site? *Animal conservation*, 28(1), 33-48.
- Trowbridge, C. M., & Litzgus, J. D. (2022). Wind farms alter amphibian community diversity and chorusing behavior. *Herpetologica*, 78(2), 75-85.
- Westover, L., Morris-Drake, A., Layton, M., Kern, J. M., Arbon, J. J., & Radford, A. N. (2025). The combined effects of elevated predation risk and anthropogenic noise on dwarf mongoose vigilance behaviour. *Biology Letters*, 21(2), 20240645.
- Williamson, B. J., Goddijn-Murphy, L., McIlvenny, J., & Youngson, A. (2024). Potential Exposure of Aquatic Organisms to Dynamic Visual Cues Originating from Aerial Wind Turbine Blades. *Fishes*, 9(12), 482.

Supplementary materials

Table S1. Time of day at which staged kestrel trials were conducted, by site and sampling period.

Site	Sampling period	No. of burrows	Time range of flight
	November 2025	1	12:47
	November 2025	5	11:36-11:47
Wind Farm Flicker	November 2025	4	10:55-11:03
	March 2026	10	16:39-16:55
	March 2026	6	09:48-10:17
Wind Farm No Flicker	March 2026	7	17:08-17:12
Wind Farm Flicker	March 2026	8	16:14-16:26

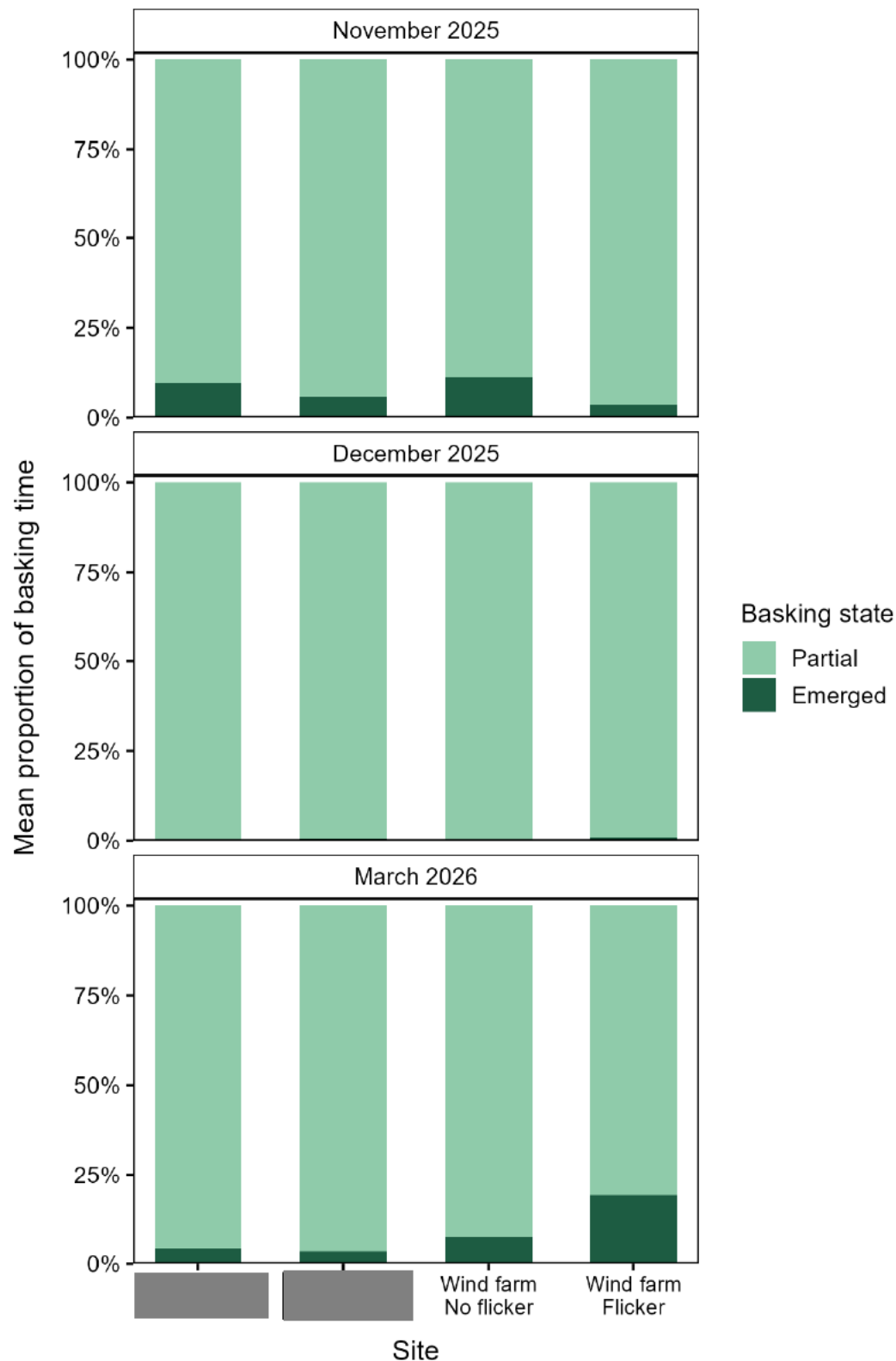


Figure S1. Mean proportion of basking time spent fully emerged (body entirely outside the burrow) versus partially emerged (head or forelimbs only) by pygmy bluetongue lizards at four sites across three sampling periods. Fully emerged individuals have no part of the body within the burrow and are therefore more exposed to aerial predation. Bars show the pooled proportion across all burrows at each site within each period.

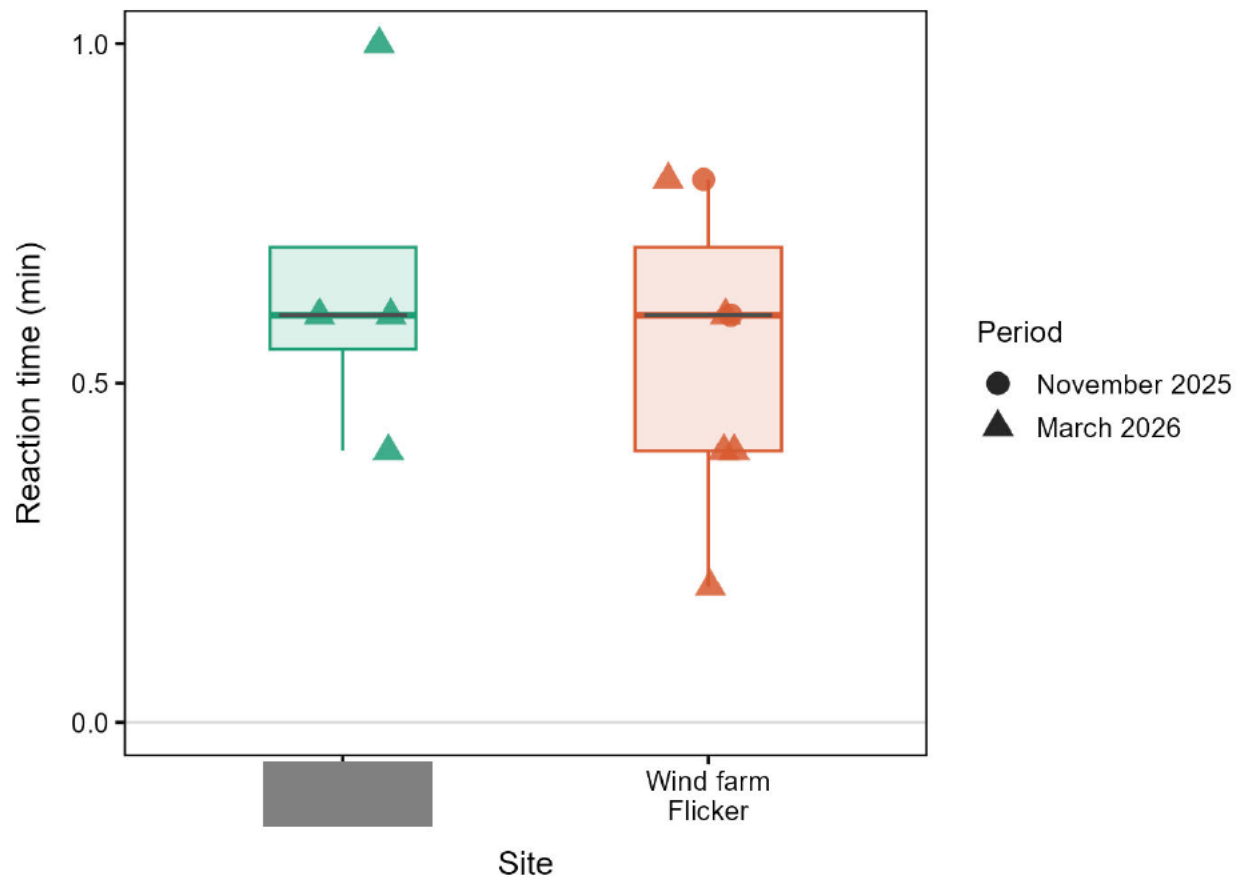


Figure S2. Reaction time of lizards retreating in response to a staged kestrel flight, measured as the time from the kestrel flight to the first scored retreat interval. Points show individual lizards; circles = November 2025, triangles = March 2026. The horizontal bar shows the median. Only individuals that retreated within one minute of the flight are included. Data from November 2025 and March 2026 sampling periods are pooled.

Appendix P

Notification to the Department of Published Compliance Report

Subject: FW: EPBC 2021/8958 - Goyder 1A EPBC Annual Compliance Report
Attachments: image001.png; 31492_R11_GSWF_S1A_EPBC_Act_Approval_Annual_Compliance_Report_V3_Final.pdf; 31492_Stage1A_EPBCCompliance_Umwelt_DataPackage_250926.zip

From: Ralph Mitchell
Sent: Monday, September 29, 2025 6:32 PM
To: EPBC Monitoring
Subject: Fw: EPBC 2021/8958 - Goyder 1A EPBC Annual Compliance Report

Dear EPBC Monitoring Team,

Please find attached the Goyder 1A EPBC Annual Compliance Report and relevant shapefile for the 12-month period 7 July 2024 – 6 July 2025.

In accordance with clause 17 of EPBC 2021/8958, a redacted version of the document was uploaded to the project website on the 26th of September 2025 and can be found [here](#).

A relevant shapefile was also uploaded to the project website on 26th of September 2025 and can be found [here](#).

Kind Regards,

Ralph Mitchell

Junior Construction Project Manager

The logo for NEOEN, with 'NEO' in blue and 'EN' in orange.

Level 21 / 570 George Street, Sydney NSW 2000

M. +61 474 731 841



P 1300 793 267 **E** info@umwelt.com.au **W** umwelt.com.au
NSW | ACT | WA | QLD | VIC | SA **ABN** 18 059 519 041