



## Environmental Protection Authority

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### *Environmental Protection Act 1986*

#### Section 40(2)(a)

#### NOTICE REQUIRING INFORMATION FOR ASSESSMENT

##### **PERSON TO WHOM THIS NOTICE IS GIVEN**

Pilbara Energy (Generation) Pty Ltd (ABN 31 631 303 305)  
256 St Georges Terrace  
**PERTH WA 6000**

##### **PROPOSAL TO WHICH THIS NOTICE RELATES:**

Bonney Downs Wind Farm

Pursuant to section 40(2)(a) of the *Environmental Protection Act 1986*, I, as a delegate of the Environmental Protection Authority (EPA), require that you provide the EPA with the following information for its assessment.

We have sought advice from technical experts within the Department of Water and Environmental Regulation and external agencies including the Department of Biodiversity, Conservation and Attractions (DBCA), Department of Planning, Lands and Heritage (DPLH), and Department of Mines, Petroleum and Exploration (DMPE).

The following key issues have been identified, with additional detail provided in the attached comments sheet (Attachment 1).

#### **1. General and mitigation hierarchy**

In accordance with [EPA Instructions](#), a Development Envelope (DE) should be as small as possible while allowing flexibility for the location of the proposal footprint. The EPA recognises that the scope of the referred proposal is large with impacts ranging across 89,973.86 ha and opportunity to further reduce impacts may be available. Where additional application of the mitigation hierarchy is possible the EPA expects that it is applied, including but not limited to exclusions zones and avoidance where feasible.

The referral package includes documents that are inconsistent with EPA guidance, and contains errors, inconsistencies and contradicting information in places. Several supporting documents to the proposal do not reflect the referred proposal. The Environmental Review Document (ERD) and all supporting documents should be revised.

#### **2. Flora and Vegetation**

The risk of direct impacts to *Quoya zonalis* is not fully understood due to survey limitations. Further information and/or investigations completed in accordance with the [EPA Technical Guidance - Flora and Vegetation survey](#) is required to fully assess the extent of potential direct impacts on threatened and Priority flora species, and determine whether the mitigation hierarchy has been adequately applied.

### **3. Terrestrial Fauna**

Additional information, including on-site investigations, is required to fully assess the extent of potential direct impacts to conservation significant fauna, particularly to the night parrot (*Pezoporus occidentalis*). The Bird and Bat Adaptive Management Plan (BBAMP) (Appendix I) requires peer review to ensure survey effort, and the proposed management triggers and monitoring are appropriate for the species likely to be impacted by the proposal.

### **4. Subterranean Fauna**

The proposal includes activities that may directly or indirectly impact Subterranean Fauna and their habitats, including to both stygofauna and troglafauna. The EPA is required to give consideration to all factors that may be significantly impacted by the proposal. The referral documentation does not consider the potential significance of impacts to Subterranean Fauna.

A discussion of the potential direct and indirect impacts to Subterranean Fauna, as well as any appropriate mitigation measures, is required to determine whether or not significant impacts are likely to occur.

### **5. Inland Waters**

There is uncertainty in respect to the surface water-groundwater connectivity along Bonnie Creek, and some information within the referral documents on pool water regime is contradictory. Further information on the conceptual hydrological functioning of the area is required to identify and mitigate potential impacts on groundwater and surface water features within, and down gradient of the proposal.

### **6. Social Surroundings**

Several of the supporting studies relating to Social Surroundings are based on a previous proposal design and layout and do not reflect the referred proposal. While the referred proposal includes fewer turbines than the previous proposal design and impacts to Social Surroundings are likely to be comparatively lower, amendments are required to accurately assess the potential impacts.

Evidence of recent and meaningful consultation with Aboriginal People(s), and other relevant stakeholders on the current proposal and outcomes of that consultation is required to demonstrate that reasonable steps to consult with those whose social surroundings are likely to be significantly affected. The EPA expects the [Technical Guidance EIA of Social Surroundings - Aboriginal Cultural Heritage](#) is demonstrably applied.

## 7. Offsets

It is noted that the need to consider offsets to counterbalance the significant residual impact to Flora and Vegetation and Terrestrial Fauna is likely required. A monetary contribution to the Pilbara Environmental Offsets Fund (PEOF) has been proposed by the Pilbara Energy (Generation) Pty Ltd. Please provide an Impact Reconciliation Procedure which adequately describes the methodology that will be used to calculate the significant residual impacts of the proposal in accordance with the EPA's [Instructions for preparing Impact Reconciliation Procedures and Impact Reconciliation Reports](#).

## 8. All environmental factors

The EPA requires that an updated ERD be submitted, incorporating the above additional information. The ERD is to be prepared consistent with the requirements of [Environmental Impact Assessment Practice Guide Assessment of Proposals in Western Australia under Part IV of the Environmental Protection Act 1986](#) (EIA Practice Guide) and the [Instructions on how to prepare an Environmental Review Document](#).

Please provide a response to this Notice by **1 July 2026**. Please include a summary of where each of the above items have been addressed in the revised documentation in your response.

Response should be sent via the Environment Online Portal where possible, by responding to the Request for Further Information (RFI) task in which this letter was received. Alternatively, by email to [EOsupport@dwer.wa.gov.au](mailto:EOsupport@dwer.wa.gov.au) quoting the RFI number RFI-0001167 in the subject line, or by post to the Environmental Protection Authority, Locked Bag 10, Joondalup DC, Perth WA 6919. Please quote the RFI number RFI-0001167 on any further correspondence.

The EPA will not proceed with its assessment of the proposal until you have provided the requested information and it is considered to be adequate, or if you advise the EPA that the further information is not available and/or cannot be obtained.

Yours sincerely



**Darren Walsh**  
CHAIR

18 May 2026

Att 1: Document Review and Comments Sheet

Att 2: Supported Noise Modelling Methodology for the Proposal



## Environmental Protection Authority

### Attachment 1: Document Review and Comments Sheet

Environmental Factor	Comment	Request for Information	Proponent Response
Flora and Vegetation	Supporting documents note that <i>Quoya zonalis</i> (Endangered) was recorded exclusively in vegetation type EIGwTe. As noted in Appendix A, individuals of this species recorded 4.5 km north of the DE and occurrences were limited to juvenile non-flowering individuals at the time of the survey, which may have impacted the ability to identify its presence within the DE. Up to 44.54 ha of vegetation type EIGwTe is proposed to be cleared for this proposal. Targeted surveys within EIGwTe for <i>Quoya zonalis</i> are not sufficient to exclude the occurrence of this species within the indicative disturbance footprint.	<p>Further apply the mitigation hierarchy and demonstrate that direct impacts to vegetation type EIGwTe have been minimised as far as practicable or provide justification for why further avoidance and mitigation has not been proposed.</p> <p>If direct impacts to vegetation type EIGwTe will occur, undertake appropriately timed targeted survey(s) of <i>Quoya zonalis</i>, during its flowering season (August) within EIGwTe to confirm whether or not it is present within the DE.</p> <p>Additional targeted survey(s) must be conducted in accordance with the <a href="#">EPA Technical Guidance - Flora and Vegetation survey</a></p> <p>Cumulative impacts on this species should be considered within the ERD.</p>	
	Appendix A indicates that some areas in the western portion of the survey area were not sampled due to access constraints (Appendix A, Map 8), however access restrictions are not listed as a constraint (Appendix A, Table 11).	<p>Clarification on whether there were access restrictions during the flora and vegetation surveys is required.</p> <p>If there were access restrictions, undertake further assessment of the likelihood of occurrence, and if required undertake additional flora and</p>	

Environmental Factor	Comment	Request for Information	Proponent Response
Flora and Vegetation		vegetation surveys in unsurveyed areas, implement an exclusion zone in unsurveyed areas, or provide justification if these are not required.	
	<p><i>Acacia cyperophylla</i> var. <i>omearana</i> (Priority 1) was recorded exclusively within vegetation type AcTe. While the Indicative Disturbance Footprint (IDF) does not intersect with vegetation type AcTe, in accordance with the EPA's <a href="#">EIA Practice Guide</a>, the EPA must assess the impacts of a proposal on the basis that the proposal may be implemented anywhere within the Development Envelope.</p> <p>If impacts on vegetation type AcTe are proposed then further information is required to determine whether significant impacts to <i>Acacia cyperophylla</i> var. <i>omearana</i> (Priority 1) are likely to occur.</p>	Implement exclusion zones to avoid impacts on vegetation type AcTe, or undertake additional sampling in vegetation type AcTe consistent with EPA's <a href="#">Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment</a> .	
	<p>The proposal includes clearing of up to 86.26 ha of the 'Four plant assemblages of the Wona Land System' Priority Ecological Community (PEC), specifically the Priority 1 sub-community 'Cracking clays of the Chichester and Mungaroo Range'. The proposed clearing represents the loss of 0.41% of this PEC in the local area (50 km radius of DE). Given the large size of the DE and linear nature of infrastructure, it is unclear why this impact cannot be avoided.</p>	<p>Further apply the mitigation hierarchy and demonstrate that direct impacts to this PEC have been minimised as far as practicable or provide justification for why further avoidance and mitigations of the PEC has not been proposed.</p> <p>Where this PEC cannot be avoided, include cumulative considerations for significance of impacts to the PEC locally and regionally, in accordance with the EPA <a href="#">Statement of environmental principles, factors, objectives and aims of EIA</a></p>	
	It is unclear whether potential cumulative impacts on flora and vegetation, and relevant other projects, have been adequately identified and quantified.	Provide a figure showing the extent of the area and the locations of projects considered as part of the cumulative impact assessment.	

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Flora and Vegetation	While impacts to conservation significant flora on a local scale have been defined, the impacts on a regional scale are unclear.	Revise Table 7-10 of the ERD to include the total known individuals (occurrences) of relevant conservation significant flora species.	
	Potential Groundwater Dependent Vegetation (GDV) (vegetation units EcAcCs and EvAcCc) has been identified within the DE and may be impacted by the proposed groundwater drawdown associated with construction of turbine foundations, noting that this has not been previously assessed under the decision-making process for groundwater licence GWL171278(7).	Provide further information in relation to the identification and management of potential impacts to GDV from groundwater drawdown during the construction phase.	
	<p>'Large areas of exclusion zones around important areas of vegetation and habitat throughout the DE' are referenced in section 7.6 of the ERD, however it is unclear where these exclusion zones are proposed.</p> <p>Additionally, the term 'no-go zone' is referenced in Table 7-12 of the ERD but is not defined, and it is unclear whether this is different to the proposed exclusion zones.</p>	<p>Provide the figures (and spatial files) that show the location and extent of the proposed exclusion zones.</p> <p>Define the term 'no-go zone' and provide a figure (or figures) that show the location and extent of the proposed no-go zones, if different from the proposed exclusion zones.</p>	
	<p>There are a number of consistency errors within the ERD, and between the ERD, Appendices, and current conservation status. including but not limited to:</p> <ul style="list-style-type: none"> <li>• <i>Paspalidium retiglume</i> is listed as Priority 3 rather than Priority 2 in Appendix A and the ERD.</li> <li>• <i>Neptunia longipila</i> (Priority 3) is incorrectly referred to as Priority 2 in Figures 5-7-1, 7-8, 7-8-1, 7-8-4 and 7-9-1 of the ERD.</li> <li>• The total potential impact on the PEC is different in Table 7-18 and in the second paragraph below Table 7-18.</li> </ul>	Review and revise the ERD and Appendices to ensure information is correct and consistent.	

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Flora and Vegetation	<ul style="list-style-type: none"> <li>Some direct impact values presented in section 1.4.1 of the Environmental Management Plan (EMP) (Appendix B) are not consistent with values elsewhere in the EMP and in the ERD.</li> </ul>		
	Appendix A is a consolidation of multiple flora and vegetation surveys. The SLR (2024) and ecologia Environment (2025) survey reports are required to validate the findings of the consolidated report.	Provide the ' <i>Bonney Downs North Detailed Flora and Vegetation Assessment</i> ' (ecologia 2024) and ' <i>Bonney Downs East Detailed Flora and Vegetation Survey</i> ' (SLR 2024) reports for review.	
Terrestrial Fauna	The collision risk model (CRM) is a new 3D flight analysis model developed by the Harry Butler Institute especially for the proposal (Appendix K) and has been used to inform the Bird and Bat Adaptive Management Plan (BBAMP) (Appendix I). While the CRM has been peer-reviewed by a mathematician (Appendix B of Appendix I), the review is brief and appears focused on mathematical validity.	<p>A peer review by a suitably qualified and experienced ecologist is required to understand the ecological appropriateness of model inputs and assumptions.</p> <p>Amend the BBAMP (Appendix I) in regard to peer review comments, where relevant.</p>	
	The implementation of an appropriate BBAMP is a key management measure to mitigate ongoing risks to birds and bats from turbine collision, strike, and barotrauma from the proposal.	A peer review of the BBAMP is required to ensure the proposed triggers, thresholds, mitigation, and monitoring are appropriate for potentially impacted species.	
	While the BBAMP (Appendix I) impact triggers applied to threatened, other conservation significant and non-listed species are suitably conservative, the percentage approach applied to migratory species, derived from <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) Significant Impact Guidelines 1.1, creates a discrepancy in the attributed risk to species and associated triggers.	Investigate an alternative trigger for migratory species that is not derived from a percentage threshold based on national and global population estimates for the species.	

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Terrestrial Fauna	<p>The trigger for non-listed species is four consecutive mortalities at the same or adjacent turbines (Table 9.1 of the BBAMP), whereas the 0.05% threshold used to calculate trigger levels for migratory species equates to between 12.5 and 300 mortalities per annum attributable to the proposal (Table 9.3 of the BBAMP).</p> <p>It is not considered appropriate that the trigger for migratory species is based on a higher number of mortalities than the trigger for non-listed species.</p>		
	<p>Potential impacts from bird and bat collision with wind turbines is discussed in section 8.7.1.2 of the ERD, however, for many species the assessment is qualitative rather than quantitative.</p>	<p>Quantify likely impacts to bird and bat species from direct strike and barotrauma during operation of the proposal where possible, or provide justification as to why only a qualitative assessment is possible.</p>	
	<p>The BBAMP (Appendix I) currently proposes bat utilisation monitoring only in October/November and February/March to align with bird surveys. Seasonal bat activity differs from birds and monitoring outside of appropriate timing will limit the ability to accurately update collision risk assessments and develop appropriate mitigation strategies.</p> <p>For example, Appendix D of Appendix H notes that the white-striped free-tailed bat, which is frequently recorded during carcass monitoring at existing wind farms, was detected only in May and July 2023. This is consistent with established knowledge, which identifies this species as occurring in the region in the winter.</p>	<p>Amend the BBAMP so that bat monitoring encompasses all seasons of bat activity, particularly for high-risk species.</p>	
	<p>Appendix K notes that collision risk modelling was not undertaken for bats due to insufficient flight height data. As a result, it is unclear whether bats,</p>	<p>Clearly outline how sufficient information on bat flight heights to</p>	

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Terrestrial Fauna	<p>including conservation significant species, are likely to be significantly impacted by the proposal.</p> <p>Section 8.2 of the BBAMP (Appendix I) states that flight data may be collected during construction and operation through the use of automatic detection units, such as radars, cameras, and acoustic monitoring technologies. The use of automatic detection units is presented as a potential data collection method however, and it is unclear how bat flight data will be collected in the absence of automatic detection units.</p> <p>Further information is required to provide the EPA with confidence that significant impacts to bats will not occur as a result of the proposal.</p>	<p>inform collision risk modelling will be collected for the proposal.</p> <p>Discuss the effectiveness and limitations of the proposed automatic detection units for the collection of bird and bat flight height data.</p> <p>Provide further information and supporting evidence to demonstrate that the proposed mitigation and adaptive management measures will reduce risks to bats.</p>	
	<p>The proposal includes clearing of 786.8 ha of the 'plain (stony/gibber)' habitat type, which is considered to be critical habitat (roosting) for the night parrot. A desktop assessment considers that the extent of long unburnt <i>Triodia longiceps</i> habitat within the DE is 281.81 ha, however Appendix F states that detailed groundtruthing may be required to accurately confirm the presence or absence of long unburnt <i>Triodia longiceps</i> within the DE.</p> <p>Additionally, it is noted that while surveys for night parrots were undertaken and nine Autonomous Recording Units (ARUs) were deployed over 98 recording nights, the surveys were undertaken prior to the publication of the recent '<i>Guidelines for Determining the Likely Presence and Habitat Usage of Night Parrot (Pezoporus occidentalis) in Western Australia</i>' (DBCA 2024) (Night Parrot Guidelines).</p>	<p>Outline a survey program for undertaking additional targeted surveys for night parrots in accordance with the Guidelines for determining the likely presence and habitat usage of night parrot (<i>Pezoporus occidentalis</i>) in Western Australia (DBCA, 2024). The survey program should outline what stage(s) of construction the surveys will be undertaken at, noting that surveys should be undertaken prior to disturbance of critical habitat (roosting) for the night parrot.</p> <p>The survey program should include undertaking on-site surveys of <i>Triodia longiceps</i> to validate desktop assessment of fire history to confirm the extent of critical habitat for night parrots within the DE.</p>	

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Terrestrial Fauna	<p>The Night Parrot Guidelines state that “<i>assuming good recording conditions and equipment requirements are met, night parrot roosting and calling can be detected within 200 m of an ARU.</i>”</p> <p>A specific figure comparing ARU deployment locations to the 281.81 ha of habitat considered to contain long unburnt <i>Triodia longiceps</i> has not been provided, however a comparison of ERD Figure 8-10 and Appendix F Map 12 suggests that there are large areas of long unburnt <i>Triodia longiceps</i> that have not been surveyed for night parrots. Given this, the size of the DE, and the linear, spread-out nature of the IDF, the surveys are not considered adequate to detect the presence of night parrots within the DE.</p> <p>Further information is required to adequately characterise risks to night parrots and the extent of critical habitat within the DE.</p>	<p>Further apply the mitigation hierarchy and demonstrate that direct impacts to long unburnt <i>Triodia longiceps</i> have been minimised as far as practicable or provide justification for why further avoidance and mitigation has not been proposed.</p> <p>Provide a figure that shows both the proposed locations of all ARUs and the areas of long unburnt <i>Triodia longiceps</i> habitat within the DE.</p>	
	<p>Appendix F refers to surveys and sampling undertaken in caves to determine that there are no caves suitable for the ghost bat or Pilbara leaf-nosed bat were identified in the DE. The number and locations of identified and surveyed caves has not been specified, so it is unclear whether all caves have been adequately surveyed.</p> <p>Additionally, there is conflicting information between Table 15 and Table 16 of Appendix F in relation to sampling effort in the gorges/gullies habitat type, which is noted to have the potential to contain caves suitable for the ghost bat and Pilbara leaf-nosed bat.</p>	<p>Provide a figure that clearly shows the locations of all known and suspected caves located within the DE, and outline which of these caves have been searched. Outline which caves are potentially suitable habitat for relevant fauna species.</p> <p>Clarify the sampling effort that has been undertaken in the gorges/gullies habitat type.</p>	
	Fauna Habitat Exclusion Zones (FHEZ) are proposed to <i>ensure no disturbance occurs within</i>	Amend the ERD and Figure 8-12 to ensure that the FHEZ are clearly	

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Terrestrial Fauna	<i>these areas'</i> , however small areas of disturbance are proposed within the FHEZ related to the Major Drainage habitat type. Exclusion zones should not include any areas of direct disturbance.	defined and do not include any disturbance.	
	Further information in relation to figures in the ERD and Appendix F is required to clearly demonstrate impacts to certain habitat types and short-range endemic (SRE) fauna.	Amend Map 18 of Appendix F to include inset(s) of the gorges/gullies habitat type and to define the square symbols that are not currently listed in the legend.	
	Section 8.7.2.6 of the ERD discusses potential impacts to fauna from noise and vibration and references several studies, however these studies are not included in the reference list and cannot be verified.	Amend the reference list to include all studies referenced in the ERD and ensure all supporting studies are provided.	
	Further information is required to understand the risks relating to feral animals and ensure the proposed mitigation measures are adequate.	<p>Discuss the potential impact of carcasses from wind turbine collision related mortalities on feral animal activity within and near the proposal.</p> <p>Amend the ERD so that feral animal management is done through fauna-specific mitigation measures, rather than being addressed through a Flora and Vegetation objective (FV-5, Table 8-33).</p>	
Subterranean Fauna	<p>Potential impacts to Subterranean Fauna have not been discussed. The ERD states significant impacts to Subterranean Fauna are unlikely, however evidence to support this statement has not been provided.</p> <p>It is acknowledged that abstraction is proposed to occur under an existing groundwater licence, GWL171278(7). Construction of proposal turbine foundations (to 35 mbgl) is likely to intercept groundwater (occurring 2 – 19 mbgl) and</p>	<p>Confirm the occurrence and distribution of potential Subterranean Fauna habitats within the DE and IDF.</p> <p>Assess the potential for the proposal to impact Subterranean Fauna as an “other” environmental factor in the ERD, highlighting any knowledge gaps or uncertainties.</p>	

Environmental Factor	Comment	Request for Information	Proponent Response
Subterranean Fauna	<p>associated dewatering activities may impact stygofauna, which has not previously been considered as part of the assessment for GWL171278(7).</p> <p>As outlined in Appendix F and the ERD, caves have been identified within the DE, which may provide habitat for troglifauna. It is unclear whether any caves will be impacted as part of the proposal, noting that a map of caves within the DE has not been provided.</p>	<p>As per the EPA's <a href="#">'Technical guidance – Subterranean fauna surveys for environmental impact assessment'</a> where there is potential for Subterranean Fauna to occur, proponents are required to undertake a Subterranean Fauna desktop study and habitat assessment to determine if surveys are warranted and the type of survey required.</p> <p>Where there is evidence indicating significant impact to subterranean fauna is likely, the EPA may require assessment of Subterranean Fauna as a key environmental factor.</p>	
Inland Waters	<p>While the hydrological modelling assesses a different layout to that proposed, the modelling is considered fit for purpose and provides a reliable prediction of changes to flows.</p> <p>However, the ERD does not clearly characterise surface water-groundwater connectivity along Bonnie Creek, and includes contradictory statements regarding the water regime of surface water pools.</p> <p>The ERD also provides contradictory information on pool water regime, including Bonnie Pool. The ERD variably states that the water regime of Bonnie Pool is ephemeral (Section 10.1.5.1, pg. 506), has persistent surface water (Section 10.1.5.2, pg. 507) and the pool is permanent (Figure 10-1).</p> <p>Table ES-3 of the ERD refers to a Construction Surface Water and Sediment Management Plan</p>	<p>Provide clear characterisation of groundwater-surface water connectivity and water regime of Bonnie Creek and provide clarification on the following:</p> <ul style="list-style-type: none"> <li>• Identify the presence of upper creeks that are saturated.</li> <li>• Confirm if any of the sites with cultural values with 'spring' in the title are associated with springs with persistent water presence.</li> <li>• Provide clear characterisation of the water regime of Bonnie Pool and other pools shown as permanent on Figures 8-5 to 8-8 and Figure 10-1. Provide evidence to support the water regime characterisation.</li> </ul> <p>Provide the referenced Construction Surface Water and Sediment</p>	

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Inland Waters	that will be implemented as a minimisation measure, however this has not been provided for review.	Management Plan for review. Management plans should be prepared in accordance with EPA <a href="#">Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans   EPA Western Australia</a>	
Social Surroundings	<p>The visual impact assessment (Appendix P) is based on a different proposal design and turbine layout. It is acknowledged that the referred proposal has fewer turbines than the design considered in Appendix P and visual impacts are likely to be comparatively lower.</p> <p>However, it is unclear which turbines have been removed/relocated, whether the referred proposal layout is visible at relevant viewpoints, and whether visual impacts of the referred proposal are likely to be significant or not.</p>	Update Appendix P in accordance with the design and layout of the referred proposal.	
	<p>The Noise Impact Study (NIS - Appendix N) is based on a different proposal design and turbine layout than referred to the EPA. The current NIS indicates that exceedances of limits applicable under the Environmental Protection (Noise) Regulations 1997 (Noise Regulations) are predicted to occur at Bonney Downs Homestead and Fortescue Camp during construction. It is acknowledged that the referred proposal has fewer turbines than the design considered in Appendix N and noise impacts are likely to be comparatively lower, however the likely exceedances remain unknown.</p> <p>The methodology used in Appendix N (CONCAWE method) is not supported when applied to wind turbine noise, as it is based on</p>	<p>Update Appendix N in relation to the following:</p> <ul style="list-style-type: none"> <li>• Modelling should be based on the design and layout of the referred proposal.</li> <li>• The noise modelling should use the methodology outlined in Attachment 2 to this RFI.</li> <li>• The methodology presented in the appendix of Attachment 2 to this RFI should be used to derive representative background noise levels at key locations.</li> <li>• Ensure that sound power levels are consistent between Appendix B and Table 4-3.</li> </ul>	

Environmental Factor	Comment	Request for Information	Proponent Response
<p>Social Surroundings</p>	<p>noise sources and atmospheric conditions close to the ground. The height of the proposed wind turbines means the CONCAWE method may not be appropriate for the proposal's noise model. Based on the design of the proposal, a supported methodology outlined in Attachment 2 to this RFI.</p> <p>Similarly, the methodology adopted to establish the "baseline noise environment" is not, in this case, supported in the context of the Noise Regulations. This is on the basis that background noise levels are not correlated to hub height wind speed. As such, any comment in Appendix N suggesting that "<i>high windspeeds result in higher background noise and may mask noise from wind turbines</i>" are not, at this stage, supported by evidence</p> <p>While the NIS identified exceedances of the various criteria, no specific mitigation measures were investigated. Mitigation measures should be developed in accordance with the EPA's mitigation hierarchy and presented in the NIS.</p> <p>Additionally, it appears that cumulative noise impacts with other nearby developments have not been considered. The proposal is located between the Nullagine Iron Ore project (L8544) and Christmas Creek mine site (L8454) and as such, some receivers may be impacted by both the proposal and existing operations in the area.</p>	<ul style="list-style-type: none"> <li>• Propose appropriate mitigation measures in accordance with the EPA's mitigation hierarchy, given modelled exceedances of various criteria.</li> <li>• Clarify whether the noise monitoring equipment "hexanodes" loggers from SiteHive comply with the requirements of Schedule 4 of the Noise Regulations.</li> <li>• Depending on the outcomes of a revised NIS, a construction noise management plan may be required to support the proposal.</li> <li>• Consider cumulative noise impacts with nearby projects, or provide justification as to why cumulative impacts are not likely to occur.</li> </ul>	
	<p>Table 9-1 of the ERD states that Traditional Owner Groups were consulted with to support the visual impact assessment (Appendix P). However, Appendix P is based on a different turbine layout.</p>	<p>Provide evidence and outcomes of consultation with Traditional Owner groups and other relevant stakeholders regarding the amended (referred) layout and study outcomes.</p>	

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Social Surroundings	The NIS (Appendix N) is also based on a different turbine layout and it is also unclear if Traditional Owner Groups have had an opportunity to review and comment on the revised layout in relation to potential noise impacts.		
	Table 9-11 and Table 9-19 in the ERD refer to impacts and mitigation in relation to Aboriginal cultural heritage values, but do not reference other sensitive receptors such as the Bonney Downs homestead, which is located within the DE and may be impacted by the proposal.	Amend Table 9-11 and Table 9-19 in the ERD to include consideration of impacts to and outcomes for all sensitive receptors.	
General	The proposed DE is considerably larger than the IDF. As outlined in the EPA's <a href="#">Instructions and template: How to identify the content of a proposal</a> , the DE should be as small as possible to minimise the spatial extent of impacts.	The size of the DE in relation to the proposed disturbance should be rationalised and further discussion/evidence provided to ensure that the mitigation hierarchy has been applied as far as practicable. This may include but is not limited to consideration of additional avoidance measures or exclusion zones as required.	
	The Index of Surveys for Assessment (ISA) data in Environment Online for the proposal (APP-0032733) appears incomplete, noting that IBSA-2025-0268 and IBSA-2025-0267 are in draft status and do not appear to have any documents or spatial data attached.  For instructions see <a href="#">Index of Surveys for Assessments</a> .	Submit ISA packages for all relevant biodiversity surveys completed.  The ISA packages should follow the appropriate procedures and data standards and include both survey reports and associated spatial information.  Where reports have been consolidated, include both consolidated reports and the reports used for the consolidations.  Confirm reference numbers received on submission.	

### Attachment 2: Supported Noise Modelling Methodology for the Proposal

#### Noise modelling

For the proposal, the following noise modelling methodology is supported:

- Use a point source at hub height without any directional characteristics to represent each turbine.
- The quoted turbine sound power levels from the manufacturer can be used without adjustment.
- Locate receivers at 4 metres above natural ground level.
- Use a ground absorption  $G = 0.5$  for the whole study area.
- Use a temperature of 10 degrees Celsius and 70% relative humidity.

Other noise sources such as battery energy storage system (BESS) or transformers should be modelled using the CONCAWE method with the following 'default worst-case' conditions depending on the time of day:

Parameter	Daytime, 0700-1900	Nighttime, 1900-0700
Wind speed	4 m/s	3 m/s
Temperature inversion lapse rate	0 °C/100 m	2 °C/100 m
Pasquill Stability	E	F
Temperature	20 °C	15 °C
Relative humidity	50%	50%

Where noise controls are required to meet the criteria, predictive modelling for the various scenarios should be clearly presented. For example, a scenario including serrated trailing edges (STE) on all the turbines could be presented as the 'base case' scenario. If STE are not sufficient to meet the criteria and curtailment options are required, these should be modelled as additional scenario(s) and clearly presented in the noise impact assessment.

All plant and equipment associated with the project (e.g. BESS, transformers, etc.) should be included as combined emissions from the proposal based on 'worst-case' operations. For BESS specifically, this means modelling should be based on 'high' fan duty unless evidence is provided that each BESS will always operate at lower duty during the nighttime period as defined in the Environmental Protection (Noise) Regulations 1997 (Noise Regulations).

#### Background noise

The impact of the proposal's noise emissions may be considered relative to the local background noise. The following procedures to determine representative background noise level for each wind speed at a receiver are supported for the proposal.

During data collection, seasonal variability in background noise, which may change with things such as deciduous foliage, crop cycle, wildlife activity, etc. should be

considered. In addition, a specific wind direction should not be over-represented in the data.

Instrumentation should meet the relevant requirements of:

- Schedule 4 of the Noise Regulations.
- Clause 6 of *IEC TS 61400-11-2:2024 Technical specification Wind energy generation systems – Part 11-2: Acoustic noise measurement techniques – Measurement of wind turbine sound characteristics in receptor position* (IEC TS 61400-11-2:2024), except where it is inconsistent with Schedule 4.
- Noise monitoring equipment shall have a broadband noise floor of 20 dB LA Fast or less.

The following measurement setup is recommended:

- Acoustic measurements to be made outdoors and in accordance with Clause 8 of IEC TS 61400-11-2:2024. A single windshield can be used; however, care is to be taken during the data reduction process to ensure wind generated noise was minimised.
- Noise levels to be recorded with the A-frequency weighting and Fast time weighting as  $L_{AF90}$  over a 10-minute period.
- $L_{A90}$  spectral data from at least 12.5 Hz to 16 kHz one-third octave band to be recorded in addition to broadband data (these data are to be retained for potential further analysis).
- Monitoring to be conducted at relevant receiver locations at which the predicted wind farm noise level exceeds the assigned noise levels at or below the turbine's maximum rated sound power level.
- Non-acoustic measurements are to be in accordance with Clause 9 of IEC TS 61400-11-2:2024.

To obtain a representative background noise level at each receiver, data may need to be collected for extended periods of time and at various times of the year. Each wind speed bin should contain at least 50 valid data points. The number of valid samples used in the data reduction should be reported.

Valid data points are considered to be data collected under the following conditions:

- When no precipitation was recorded.
- When the 10-min averaged measured wind speed at the receiver was 5 m/s or less, unless high-wind microphone windshields are used and manufacturer's performance data can be provided.
- Between the hours of 1900 and 0700 the following day.

The representative background noise level in each hub height wind speed bin should then be determined as the 10<sup>th</sup> percentile ( $L_{90}$ ) of the valid broadband  $L_{AF90,10mins}$  data in that bin.