GOVERNMENT OF WESTERN AUSTRALIA

Environmental Protection Authority

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 (ACN: 631 303 305)
256 St Georges Terrace
PERTH WA 6000

PROPOSAL TO WHICH THIS NOTICE RELATES:
East Pilbara Generation Hub

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.

1. **General**
   - Outline the significant environmental values present within the Development Envelope (DE) that will be committed to be avoided. It is recommended to apply appropriate exclusion zones to these values where proposal flexibility is not required. Provide figure(s) depicting the locations of these significant environmental values and exclusion zones.
   - Review and amend existing figure(s) as required so that symbology is clearly visible and does not overlap, using fly-out boxes where required.
   - It is unclear whether the indicative layout includes referred infrastructure elements such as the airstrip and waste management infrastructure. Clarify whether the clearing required for this infrastructure has been accounted for and depict the indicative location(s) being considered. Include an overlay of significant environmental values and receptors likely to be impacted by infrastructure activities for context.
   - Provide evidence of meaningful consultation with proponents of other known projects intersecting with the Proposal, such as the Corunna Downs Project and the Warrawoona Gold Project. Provide the outcomes of that consultation, including any co-location agreements.
   - Provide evidence of meaningful consultation with other land users of the Corunna Downs, Eginbah, and Panorama Pastoral Stations, and provide the outcomes of that consultation.
   - Appendix J of the Environmental Review Document (ERD) refers to a processing plant that includes electrolysis (Section 1.1), however hydrogen production and electrolysis is not included within the scope of the referral in

the ERD or Proposal Content Document. Clarify if hydrogen production or electrolysis is intended to be included in the Proposal, and remove references to such if not.

- Submit all terrestrial biodiversity survey investigations conducted for assessment to Index of Biodiversity Surveys for Assessments (IBSA) and quote the submission number(s) in your response.
- Revise Section 12 (Offsets) of the ERD following completion of supplementary investigations (detailed below) to reflect the most recent data for Flora and Vegetation, and Terrestrial Fauna.

2. Flora and vegetation

- Supplementary targeted flora survey(s) should be undertaken in accordance with the EPA's Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment to address the limitations of the previous survey (Appendix A) and should target all known Threatened and Priority flora, as well as those species listed in Section 6.1.2 and 6.1.4 of Appendix A of the ERD. Where additional targeted surveys are not possible prior to RFI response, provide justification as to why. Please note that the assessment will consider the need for future ground truthing where survey limitations remain.
- Provide one consolidated report of all flora and vegetation surveys, including consolidated figures, once supplementary targeted flora survey(s) is completed.
- Reassess the potential impacts (direct and indirect) to Flora and Vegetation once the supplementary targeted flora survey(s) is completed. Outline appropriate mitigation measures to manage any additional or changed impacts and the predicted outcome(s).
- Provide detailed information on the proposed rehabilitation of temporary clearing areas in relation to both Flora and Vegetation and Terrestrial Fauna habitat. Information should include timeframes and staging, methodology and technique, completion criteria, and monitoring. For National, State, and Regionally Significant vegetation/habitat types, identify appropriate analogue sites to develop completion criteria that considers the ecological attributes of these areas to ensure values are returned to the rehabilitated areas. Outline trigger criteria and response actions in the event that monitoring indicates the completion criteria may not be achieved.
- Revise Appendix M of the ERD to include management of indirect impacts to Flora and Vegetation. The revision should be undertaken in accordance with the EPA's Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans.
- Provide the following procedures and plans referred to in the ERD as mitigation measures as appendices for consideration during assessment:
    - Rehabilitation and Revegetation Monitoring Procedure (Reference: 45-GU-EN-0009).
    - Weed Management Plan (Reference: 45-PL-EN-0033).
    - Ground Disturbance and Topsoil Management Procedure (Reference: IO-PR-EN-0010).

3. Terrestrial fauna

- Supplementary targeted fauna survey(s) should be undertaken in accordance with the EPA's Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment to address the limitations of the previous survey (Appendix B, Ecoscape 2025). The supplementary targeted survey(s) should additionally include targeted searches for species most at risk of impacts from the operation of wind turbines, particularly *Falco hypoleucos* (grey falcon), other birds and bats, and their habitat (e.g. nesting sites, caves), and outline the significance of this habitat to fauna recorded within the DE.
- Provide one consolidated report of all fauna surveys, including consolidated figures, once the required supplementary targeted fauna survey(s) is completed.
- Reassess the potential impacts (direct and indirect) on Terrestrial Fauna once the supplementary targeted fauna survey has been completed. Outline appropriate mitigation measures to manage any additional or changed impacts and the predicted outcome(s).
- Provide figure(s) that clearly outline the areas that cannot be accessed for surveys due to heritage or third-party restrictions and provide detail as to how these limitations are considered with respect to an impact assessment.
- Provide or amend existing figure(s) in the ERD and supporting documents to show:
    - Sampling effort in relation to fauna habitat and the Indicative Disturbance Footprint (IDF) and DE, to demonstrate that all suitable habitat has been sampled.
    - Short-range endemic (SRE) fauna sampling effort in relation to fauna habitat within the DE and IDF, to demonstrate that all suitable habitat has been sampled.
    - Fauna records and critical habitat in relation to the IDF and DE, including the indicative locations of proposed wind turbines.
    - SRE occurrences in relation to the DE and IDF.
- Provide the 'East Pilbara Generation Hub – Bird and Bat Utilisation Surveys' (Spectrum 2024) report referred to in the ERD. Depending on recommendations presented within Spectrum 2024, and the outcomes of the supplementary targeted fauna survey(s), supplementary bird and bat utilisation survey(s) may be required.
- If the research on potential impacts to birds and bats from wind generation projects being undertaken with the Harry Butler Institute, Murdoch University is completed during assessment, provide this to inform the assessment.
- Discuss the direct and indirect impacts to microhabitats recorded within the survey area, including caves, gorges, dense vegetation patches and permanent water bodies.
- Provide supporting evidence and research to demonstrate how the proposed spacing of turbines, use of large turbines, and low blade rotational speeds will reduce the potential impacts on birds and bats, as stated in the ERD. Clearly outline how collision and mortality rates are impacted by the proposed mitigation measures.

- The ERD (p. 180) refers to the development of a Bird and Bat Adaptive Management Plan (BBAMP) that will inform the implementation of mitigation measures. Provide the BBAMP and details on a bird and bat monitoring program as discussed in Section 8.7 of the ERD. The BBAMP should include mitigation controls as discussed in Table 8-29 of the ERD, with discussion and consideration of other available options such as curtailment. Further details below.
    - Methods proven to increase the visibility of wind turbines for birds include painting one blade or the base of the tower black (Stokke et al. 2020; May et al. 2020), and it is theorised that using achromatic patterns on blades could improve visibility for more bird taxa (Martin & Banks 2023). Consider implementing these and other known turbine curtailment and strike mitigation measures for the Proposal. If known mitigation measures will not be implemented, provide justification as to why.
- Consider the relocation of turbines within the Development Envelope away from suitable *Falco hypoleucos* (grey falcon) breeding habitat, as studies have shown reduced breeding success of eagles when territories were within 500 m of wind turbines (Dahl et al. 2011). Provide justification if turbines cannot be relocated from suitable *Falco hypoleucos* (grey falcon) breeding habitat.
- The flight height of *Rhinonicteris aurantia* (Pilbara form) (Pilbara leaf-nosed bat) and *Macroderma gigas* (ghost bat) has not been well studied. Consider the flight height of bats, including the *Rhinonicteris aurantia* (Pilbara form) (Pilbara leaf-nosed bat) and *Macroderma gigas* (ghost bat), during long distance dispersal events between roosting sites and discuss the risk of collision with the turbines during these events. Assess the Proposal's potential to alter flight paths to and from critical roosting caves (category 1 and 2) located within the DE and within 20 km, including Bow Bells and Klondyke Queen at the Warrawoona Gold Project, CO-CA-01 at the Corunna Downs Project, and Copper Hills near the McPhee Creek Iron Ore Project. Consideration should also be given to bats being attracted to the turbines and altering their flight height as a result, which studies have shown occurs for some bat species (Cryan et al. 2014; Richardson et al. 2021). The discussion should be supported by a statement from a subject matter expert.
- Amend Table 8-28 of the ERD to consider the potential cumulative impacts of wind turbines occupying important flightpaths between roosting and foraging sites.
- Refer to the 'Guidelines for determining the likely presence and habitat usage of night parrot (*Pezoporus occidentalis*) in Western Australia' (DBCA 2024) in Section 8.2 of the ERD, rather than the 'Interim Guideline for Preliminary Surveys of Night Parrot (*Pezoporus occidentalis*) in WA' (DPAW 2017).
- Assess the potential impacts of the Proposal to the SRE singletons identified within the survey area and propose appropriate mitigation measures where potential impacts are likely to be significant.
- Revise Appendix M of the ERD to include environmental outcomes relating to impacts from wind turbines and associated infrastructure, such as transmission lines. Environmental outcomes should include consideration of

bird and bat collisions and mortality. Feral cat management should be expanded to include trigger and threshold criterion, response actions and monitoring. The revisions should be undertaken in accordance with the EPA's Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans.

- Provide further information on the caves and their significance to fauna within the survey area. Outline the reasons for implementing a 100 m exclusion zone around *Macroderma gigas* (ghost bat) caves, given that the ERD states that no individuals or roosting caves have been identified within the DE or wider survey area (ERD, p. 257).

4. Social surroundings

- Complete and provide the dust assessments.
- Revise Appendix E noise modelling to consider the full suite of expected noise sources from the proposed infrastructure and works and provide additional detail for the model inputs, such as makes and models of proposed infrastructure, where available. Where specific inputs are unavailable, justify what inputs are used instead. The proponent should ensure the model clearly represents the worst-case noise impact to land users as if all proposed infrastructure were installed and operational. Where changes to noise impacts and proposed mitigations occur, update the ERD accordingly.
- Provide further information and rationale which informed the development of the proposed noise criteria to represent impacts to Aboriginal People and Cultural Heritage activities. Information should include detail on who was consulted, the nature and outcome of consultation in establishing these criteria, if it occurred.
- Ensure noise considerations are made for on-site worker accommodation and describe which standards/regulations will be applied to ensure workers/contractors are not significantly impacted by noise and vibration during construction and operation.
- Provide the 'East Pilbara Generation Hub – Environmental Construction Vibration Assessment' (Talis Consultants 2024) report referred to in the ERD.
- In accordance with EPA guidance (Technical Guidance EIA of Social Surroundings - Aboriginal Cultural Heritage (Nov2023)_2.pdf), provide information on physical or biological impacts to Aboriginal Cultural Heritage (ACH) where harm is avoided or minimised under the *Aboriginal Heritage Act 1972* (AH Act). Where physical or biological impacts to ACH are not considered under the AH Act, the ERD should present detail on reasonable steps taken to consult with relevant Aboriginal People(s) (including Nyamal People) to identify and mitigate physical or biological impacts, including residual impacts likely to cause significant harm to ACH values.
- Detail the process used to consult with relevant Aboriginal People(s), including the Nyamal People, to characterise the heritage and cultural heritage within the DE.
- Provide evidence of meaningful consultation with Aboriginal People(s), and provide the outcomes of that consultation, for matters including but not limited to:

  - Ongoing archaeological and ethnographic surveys.
  - Whether the proposed impacts to visual amenity, access/use of country, or heritage values from noise, dust and infrastructure is likely to be significant.
  - Additional mitigation measures.
- Provide figure(s) that depict the overlap of the North Pole Dome/Meentheena site and the DE.
- Identify and contextualise the values within the North Pole Dome/Meentheena site area that intersects with the DE and justify the significance of proposed impact(s).
- Provide the following procedure referred to in the ERD as a mitigation measure as appendices for consideration during assessment:
  - Blasting Near Heritage Place Procedure (Reference: 100-PR-HE-0003).

5. Inland waters

- Propose viable solutions to sourcing water required for construction, given that the ERD states that groundwater abstraction was modelled to account for 46% of demand. Assess any environmental impacts relevant to the proposed solution(s) and propose appropriate mitigation measures to manage these impacts.

It is recommended that the Referral Information documentation be revised to include and address all requested additional information above.

Please provide your response or advise when a response will be available by **16 January 2026**. Please include a summary of where each of the above items have been addressed in the revised documentation in your response.

Your response should be sent by email to registrar@dwer.wa.gov.au marked for the attention of the person cited in the covering letter, or by post to the Environmental Protection Authority, Locked Bag 10, Joondalup DC, Perth WA 6919. Please quote the case number APP-0028863 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

21 July 2025

References

Cryan, P. M., P. M. Gorresen, C. D. Hein, M. R. Schirmacher, R. H. Diehl, M. M. Huso, D. T. S. Hayman, P. D. Fricker, F. J. Bonaccorso, D. H. Johnson, K. Heist, & D. C. Dalton. (2014). Behavior of bats at wind turbines. Proceedings National Academy Sciences 111:15126–15131.

Dahl, E. L., Bevanger, K., Nygård, T., Røkaft, E., & Stokke, B.G. (2012) Reduced breeding success in white-tailed eagles at Smøa wind farm western Norway, is caused by mortality and displacement. Biol Conserv 2012;145:79e85.

Martin, G. R., & Banks, A. N. (2023). Marine birds: Vision-based wind turbine collision mitigation. Global Ecology and Conservation, 42, e02386 https://doi.org/10.1016/j.gecco.2023.e02386.

May, R., Torgeir, N., Falkdalen, U., Åström, J., Hamre, Ø., & Stokke, B. G. (2020). Paint it black: Efficacy of increased wind turbine rotor blade visibility to reduce avian fatalities, Ecology and Evolution 10(16), 8927-8935. https://doi.org/10.1002/ece3.6592.

Richardson, S. M., Lintott, P. R., Hosken, D. J., Economou, T., & Mathews, F. (2021). Peaks in bat activity at turbines and the implications for mitigating the impact of wind energy developments on bats. Sci. Rep. (2021), 11, 3636.

Stokke, B.G., Nygård, T., Falkdalen, U., Pedersen, H.C. & May, R. (2020). Effect of tower base painting on willow ptarmigan collision rates with wind turbines. Ecology and Evolution, 10(12), 5670–5679. https://doi.org/10.1002/ece3.6307.