Your ref: SSD-59701722
Our ref: DOC23-592088

Mr Kurtis Wathen
Environmental Assessment Officer
Department of Planning and Environment – Planning Group

Via Major Projects Portal: PAE- 59718994

Dear Kurtis

Subject: Request for Secretary's Environmental Assessment Requirements – Tchelery Wind Farm (SSD-592088)

Thank you for your email dated 3 July 2023 seeking input from the Biodiversity and Conservation Division (BCD) into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Tchelery Wind Farm (SSD-592088).

BCD have reviewed the supplied documents, being:

- Tchelery Wind Farm Scoping Report, WSP, June 2023
- Draft SEARs for agencies, DPE

We provide SEARs for the proposed development in **Attachment A.** Guidance material is listed in **Attachment B**. We propose minor amendments to the Draft SEARs at **Attachment C**.

BCD recommends that the EIS appropriately address the following:

1. Biodiversity
2. Flooding
3. National Parks and Wildlife Estate

The EIS should fully describe the proposal, the existing environment, including threatened species habitat not associated with vegetation communities such as paddock trees, and impacts of the development including the location and extent of all proposed works that may impact on flooding and biodiversity. Please note:

- The scale and intensity of the proposed development should dictate the level of investigation.
- It is important that all conclusions are supported by adequate data.
- The assessment must include all ancillary infrastructure associated with the project such as roads, water and power supplies, and Rural Fire Service requirements for asset protection.
- Strategies for adaptive management and associated monitoring for the project will need to conform to the most current NSW and Australian standards and guidelines for windfarm developments.
- Regional-scale Plant Community Type (PCT) mapping may not be accurate at a site scale so should not be relied on for the assessment.

<u>Biodiversity</u>

The anticipated impact will need to be determined as part of the EIS using the Biodiversity Assessment Method 2020 (BAM) and documented in a Biodiversity Development Assessment Report (BDAR). Survey methods must be consistent with BAM requirements, unless otherwise

agreed with BCD. Minimum requirements for the biodiversity assessment are listed in Appendix K of the BAM. The Accredited Assessor preparing the BDAR is advised to follow the BDAR template (DPE 2022), and provide spatial data as specified in Appendix D of the BAM 2020 Operational Manual – Stage 2.

The *Biodiversity Conservation Act 2016* (BC Act) sections 6.2(d) and s6.4(1) set out the requirement to apply the 'avoid, minimise, offset' hierarchy for development approvals. The proposal must demonstrate that impacts to threatened biodiversity have, in the first instance, been avoided. Additionally, the project must document commitments to mitigate and manage impacts, including impacts which are uncertain, in accordance with Section 8.4 of the BAM 2020.

The Scoping Report has identified numerous threatened ecological communities under the BC Act and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as present within the footprint and likely to be impacted by the proposed development, including:

- *Acacia melvillei* Shrubland (endangered BC Act)
- *Allocasuarina luehmannii* Woodland / Bulloke Woodlands in the Riverina and Murray-Darling Depression Bioregions (endangered BC Act and EPBC Act)
- Weeping Myall Woodlands (endangered BC Act and EPBC Act)
- Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions (endangered BC Act)

The presence or not of Natural Grasslands of the Murray Valley Plains (critically endangered EPBC Act) will need to be adequately justified as the proposal appears to be within the indicative distribution map available on the Australian government website (http://www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=117).

Scoping Report Sections 6.2.1.2 and 6.2.1.3 identify the threatened flora and fauna predicted or known to occur in the project site, however we note these lists are not exhaustive. These sections include birds which may be at risk of collision with wind turbines. A full assessment of the risk to bird and bat species and how such risk may be mitigated, must be completed, and provided in the BDAR along with a Bird and Bat Adaptive Management Plan.

The proponent must set out how impacts to biodiversity will be avoided and minimised. Given the extent of native vegetation across the site, opportunities to avoid direct impacts to native vegetation should focus on avoiding TECs and habitat of threatened species such as the endangered Plains-wanderer.

Where targeted surveys in PCTs associated with candidate species have not been completed due to access constraints (e.g. prolonged flooding), species must be assumed present until targeted survey effort can be completed. This must happen prior to project approval and preferably before EIS exhibition. However, the assumed presence approach does not enable the avoid and minimise requirement to be considered for those species/locations.

Given the location of the proposal in relation to the South West Renewable Energy Zone, the cumulative impact of electricity generation in the surrounding region should be assessed through application of the Cumulative Impact Assessment Guidelines for State Significant Projects.

If the EIS and associated BDAR do not comply with the BAM, further surveys during the Response to Submissions (RTS) period will be required, which may prolong the approval process. BCD discourages this approach and understands that no approvals will be issued for projects that rely on assumed presence and post approval surveys due to proponent timelines.

When the BDAR is submitted, we request that the BAM accredited assessor provides the required spatial data which reflects the figures within the BDAR directly to BCD if it is too large to be uploaded into the Biodiversity Offset and Agreement Management System.

The EIS should identify any relevant Matters of National Environmental Significance (MNES), and whether the proposal has been referred to the Australian Government or already determined to be

a controlled action under the EPBC Act. BCD will provide additional recommendations for the MNES assessment if the proposal is determined to be a controlled action.

Flooding

The project site is located in the Lower Murrumbidgee catchment in the vicinity of the Abercrombie and the Forest Creek systems. Flooding in the project area would likely originate from local intense rainfall events that initiate flows in these ephemeral creek systems and adjacent floodplains. Given this, it is important that the hydrology of the site be investigated to aid in the site design and the placement of infrastructure to minimise flood risks.

The EIS should specifically address the attached requirements for flooding and conduct flood modelling for the purposes of appropriately locating infrastructure and for assessing impacts, including on waterway crossings for site access.

National Parks and Wildlife Estate

The proposal is proximate to lands reserved under Part 4 of the *National Parks and Wildlife Act 1974*, being Yanga National Park, Kalyarr National Park and Oolamabeyan National Park. NSW National Parks and Wildlife Service (NPWS) requests that the recommended environmental assessment requirements listed in Attachment A (13) be included as part of the SEARs to ensure the future preparation of an EIS explicitly considers the indirect and cumulative impacts to the National Parks and Wildlife Estate.

If you have any questions regarding this advice, please contact Simon Maffei, Senior Project Officer, Planning, South West Biodiversity and Conservation Division via rog.southwest@environment.nsw.gov.au or 02 6022 0646.

Yours sincerely

Adam Vey

Director South West, Biodiversity and Conservation Division
Environment and Heritage Group
Department of Planning and Environment

18 July 2023

ATTACHMENT A – Recommended Environmental Assessment Requirements for Tchelery Wind Farm (SSD-592088)
ATTACHMENT B – Guidance material

Attachment A **Recommended Environmental Assessment Requirements for Tchelery Wind Farm (SSD-592088)**

Sources of guidance material for terms in blue are in Attachment B

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the *Biodiversity Conservation Act 2016* using the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and the BAM, unless DPE determines that the proposed development is not likely to have any significant impact on biodiversity values.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect, uncertain and prescribed impacts in accordance with the BAM.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows; a. The total number and classes of biodiversity credits required to be retired for the development/project; b. The number and classes of like-for-like biodiversity credits proposed to be retired; c. The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; d. Any proposal to fund a biodiversity conservation action; e. Any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
4. The BDAR must be submitted with all digital spatial data associated with the survey and assessment as per Appendix K of the BAM.
5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.
6. The EIS must assess all components of the proposal, including any ancillary activities such as road/track widening to enable transport of infrastructure components, connecting pipelines and transmission lines etc.
7. The EIS must assess the impact of wind turbine strikes on protected animals including; a) Predict the likelihood of impact on aerial species resident in, or likely to fly over, the project area, including but not limited to bat/bird strike and barotrauma. b) Predict the rate of impact per turbine per year for species likely to be affected. c) Justify predictions of likelihood of impact and rates of impact with reference to relevant literature and other published sources of information.

d) Predict the consequences of impacts for the persistence of bioregional populations, with reference to relevant literature and other published sources of information.

e) Predict and map the likely zone of disturbance around wind turbines for aerial species resident in, or likely to fly over, the project area, with reference to relevant literature and other published sources of information.

f) Map significant landscape and habitat features within the zone of disturbance for species likely to be affected, including but not limited to hollow bearing trees, nest trees, microbat habitat and important habitat for migratory species.

g) Predict the likelihood and describe the nature of indirect impacts on aerial species resident in, or likely to fly over, the project area including but not limited to barriers to migratory pathways and breeding, feeding and resting resources.

h) For migratory species, predict the impact of avoidance behaviour relative to migration distances and the availability of suitable habitat for breeding, feeding and resting over the migration route, with reference to relevant literature and other sources of published information.

i) Justify prediction of likelihood and nature of impact, with reference to relevant literature and other published sources of information.

j) Predict the cumulative impact of the project together with existing wind farms with respect to movement patterns and the use of adjacent habitat and provide justification for these predictions.

Flooding

8. The EIS must map the following features relevant to flooding as described in the Flood Risk Management Manual: the policy and manual for flood liable land (NSW Government 2023) including:
   a. Flood prone land.
   b. Flood planning area, the area below the flood planning level.
   c. Hydraulic categorisation (floodways and flood storage areas).
   d. Flood hazard.

9. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.

10. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 9 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

11. Modelling in the EIS must consider and document:
    a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.

b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
d. Relevant provisions of the Flood Risk Management Manual: the policy and manual for flood liable land (2023).

12. The EIS must assess the impacts on the proposed development on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council Floodplain Risk Management Plans.
    c. Consistency with any Rural Floodplain Management Plans.
    d. Compatibility with the flood hazard of the land.
    e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
    h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
    i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
    j. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
    k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

National Parks and Wildlife Estate

13. The EIS must identify and assess:
    (a) In the case of a project that is proximate to land reserved under Part 4 of the National Parks and Wildlife Act 1974 as an environmentally sensitive area of State significance, ensure indirect and cumulative impacts are considered in the context of:
        i. landscape connectivity, reliance of migratory and threatened species assemblages, and the key ecological functions the reserved land provides
        ii. hydrology, visual amenity (view lines) and noise in the landscape, addressing the extent of the impact as it relates to environmental quality and the public enjoyment of land reserved
        iii. measures proposed to prevent, control, abate and minimise accumulative impacts including an evaluation of their effectiveness and reliability over the life of the project
        iv. residual impacts and their significance in the protection, management, public use and enjoyment of lands reserved, considering the public interest in the conservation of the

	natural and cultural values attached to land reserved and identify risks to operations undertaken by the National Parks and Wildlife Service as a result of the project. In consultation with NSW National Parks and Wildlife Service.

Attachment B Guidance material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	www.legislation.nsw.gov.au/#/view/act/2016/63/full
Environment Protection and Biodiversity Conservation Act 1999	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
National Parks and Wildlife Act 1974	www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Wilderness Act 1987	www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method 2020 (DPIE 2020)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-2020
Biodiversity Assessment Method 2020 Operational Manual – Stage 1 (DPE 2022)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-manual-2020-operational-manual-stage-1
Biodiversity Assessment Method 2020 Operational Manual – Stage 2 (DPE 2023)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-2
BDAR Template (DPE 2022)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-for-the-biodiversity-development-assessment-report-template
BAM Assessor Resources (including links to Survey Guidelines, Registers and Databases)	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/accredited-assessors/assessor-resources
BAM Assessor FAQ	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/accredited-assessors/assessor-questions-and-answers
Biodiversity Values Map	www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap https://datasets.seed.nsw.gov.au/dataset/biodiversity-values-map
Guidance to assist a decision maker to determine a serious and irreversible impact (DPIE 2019)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf
Ancillary rules: biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Ancillary rules: reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf

Title	Web address
DPIE Threatened Species Profiles	www.environment.nsw.gov.au/threatenedspeciesapp/
BioNet Atlas	www.environment.nsw.gov.au/wildlifeatlas/about.htm
BioNet Vegetation Classification – see **NSW Plant Community Type (PCT) classification** link for PCT database login page.	http://www.environment.nsw.gov.au/research/Visclassification.htm
NSW SEED Data Portal (access to online spatial data)	https://www.seed.nsw.gov.au/
Fisheries NSW policies and guidelines	www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
Cumulative Impact Assessment Guidelines for Significant Projects	www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/Policy-and-legislation/SSPT-Guidelines/GD1259-RAF-Assessing-Cumulative-Impacts-Guide-final.pdf
Flooding	
Flood Risk Management Manual: the policy and manual for flood liable land (2023)	https://www.environment.nsw.gov.au/topics/water/floodplains/floodplain-manual
Australian Rainfall and Runoff: A Guide to Flood Estimation	http://arr.ga.gov.au/
NSW Climate Impact Profile	climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	www.environment.gov.au/climate-change/adaptation/publications/climate-change-impact-risk-management
National Parks and Wildlife Estate	
Developments adjacent to National Parks and Wildlife Service lands Guidelines for consent and planning authorities (DPIE 2020)	www.environment.nsw.gov.au/research-and-publications/publications-search/developments-adjacent-to-national-parks-and-wildlife-service-lands