



Our ref: DOC25/726556

Your ref: SSI-70610456

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Dear Kurtis

Hunter Transmission Project Environmental Impact Statement (SSI-70610456)

Thank you for your request via the NSW Planning Portal dated 22 August 2025 to the Conservation Programs, Heritage and Regulation Group (CPHR) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) inviting comments on the Environmental Impact Statement (EIS) for the Hunter Transmission Project (HTP).

CPHR has reviewed the EIS and Biodiversity Development Assessment Report (BDAR). CPHR's review is provided in **Attachment A**.

The project is a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC 2024/09874) and impacts to EPBC Act listed entities will be assessed under the assessment bilateral agreement. CPHR has also considered Matters of National Environmental Significance (MNES) in its recommendations (**Attachment B**).

CPHR reviewed key elements of the draft BDAR prior to EIS exhibition and provided separate advice on 2 September 2025, that identified issues to be addressed during the Response to Submissions (RTS) stage. EnergyCo have committed to addressing these issues, as outlined in **Attachment C**. CPHR understands the proponent is undertaking work to be incorporated into the BDAR at the RTS phase. CPHR will continue to work with EnergyCo to support delivery of a final BDAR compliant with the Biodiversity Assessment Method (BAM) 2020. Some of the outstanding issues include:

- the identification of excluded land, and classification of some native vegetation into Plant Community Types (PCTs)
- addressing inconsistencies in the spatial data, BAM Calculator, and BDAR to ensure an accurate credit obligation is identified
- improved description and assessment of indirect and prescribed impacts
- further information on measures to be implemented to mitigate, monitor, and manage impacts during construction
- updating the MNES assessment to ensure consistency with the BDAR and BAM-C, ensure all MNES impacted are adequately assessed and the necessary information is provided to complete the bilateral assessment
- detail on flood management plans incorporating appropriate mitigation infrastructure and controls for all construction sites and access tracks.

CPHR recommends that the Department of Planning, Housing and Infrastructure (DPHI) seeks an updated BDAR that incorporates all the recommendations. The updated BDAR should be provided with the Response to Submissions report.

The NSW National Parks and Wildlife Service will provide a separate response.

If you have any questions about this advice, please do not hesitate to contact our Hunter Central Coast Planning Team at huntercentralcoast@environment.nsw.gov.au.

Yours sincerely



Louisa Mamouny
Executive Director
Conservation Programs, Heritage and Regulation Group

24 September 2025

Attachment A – CPHR review

Attachment B – Bilateral assessment information and data requirements

Attachment C – EnergyCo commitment to BDAR revisions and issue resolution

Attachment D – Abbreviation

ATTACHMENT A: CPHR Review

Land category assessment

Recommendation 1: Ensure the BDAR addresses issues with land categorisation.

- Land on which critically endangered (CE) flora species or CE ecological communities (CEEC) should be designated as Category 2 land. This should consider the six species in Table 1.
- PCT 3314 is associated with the Box Gum Woodland CEEC and has been recorded in the alignment. If the PCT is the CEEC, this area must be considered Category 2 land.
- Only land that contains low conservation value grasslands under section 60H (2)(a) of the LLS Act or low conservation value groundcover under section 109(1) of the LLS Regulation can be designated as Category 1 land. Clarify the use of IGGAM on Category 1 land, including stratification, sampling intensity, provision of site-based field assessment, and outputs from the IGGAM Calculator.
- Two EPBC Act-listed CEECs (Warkworth Sands Woodland of the Hunter Valley CEEC and the Central Hunter Valley Eucalypt Forest and Woodland CEEC) are considered in section 4.1.3.4 of the BDAR. If a CEEC is only listed under the EPBC Act, it does not need to be considered in the land category assessment. Areas that are Category 2 land in the BDAR that are mapped as Category 1 land on the draft NVR Map due to the presence of EPBC Act-listed CEECs can be considered Category 1 land.
- Two CE flora species which are listed under the EPBC Act and not the BC Act were considered for further assessment in the BDAR. *Brachyscome brownii* was recorded in the alignment and *Prasophyllum* sp. Wybong was assumed present. The Australian Government may recommend separate assessment for these entities in Category 1 land.
- The spatial data shows areas mapped as Category 2 land on the transitional NVR Map have been re-categorised as Category 1 land. The transitional NVR map is enforceable and a NVR Map review is required to change land categorisation. The BAM must be applied in any areas that are not re-categorised following the formal map review process.
- The draft regulatory map should be used to identify land category, rather than proposing alternative methods (section 4.1.3.7 of the BDAR). This should include areas with scattered trees (see Figures 1 and 2). Seeking a formal NVR Map review is recommended if seeking to assess land as Category 1 land when it appears on the map as Category 2 land to minimise uncertainty.
- Existing roads in the alignment mapped as Category 2 land on the draft NVR Map have been re-categorised as Category 1 land in the BDAR. Instead, the existing road width should be mapped as PCT 0 and no further assessment required.
- The BDAR must independently assess land categorisation in the Hunter Valley Operations North Open Cut Coal Continuation Project (HVOCCP) which intersect with HTP (section 4.1.3.5 of the BDAR). The HVOCCP land categorisation assessment is not part of an approved development.
- For existing transmission lines, these should be assessed under the BAM unless there are previous approvals (section 4.1.3.6 of the BDAR) rather than being treated as SP2 Infrastructure excluded from the LLS Act.
- If clearing proposed for this project aligns with approved management practices within existing transmission line easements, the relevant areas can be excluded from assessment. Otherwise, land within the existing transmission line easements that is proposed to be cleared as part of this project should be assessed.
- Assess 82 ha of 'excluded land' under the BAM and reflect in the BDAR (Part 5A of the LLS Act does not apply to excluded land, so the BAM must be applied in these areas).

- Provide explanation of approvals used to exclude land (Figure 14.6 in the BDAR).
- Areas mapped as Category 2 land on the transitional NVR Map should be assessed and included in the BDAR unless there is further explanation (see Figure 3 below).

Table 1. Critically endangered flora to be considered in the land category assessment

Species	Comments	Recommendation
<i>Genoplesium insigne</i> (Variable midge orchid)	Recorded in targeted surveys in existing transmission easement	Assess the potential for occurrence in the Wyong IBRA subregion.
<i>Genoplesium branwhiteorum</i> (Charmhaven midge orchid)	Not recorded in targeted surveys.	Use information from the TBDC and the species profile, and results from targeted surveys completed for the project to justify exclusion of suitable habitat.
<i>Leionema lamprophyllum</i> subsp. <i>Fractum</i>	Not recorded in targeted surveys.	Use information from the TBDC and the species profile, and results from targeted surveys completed for the project to justify exclusion of suitable habitat.
<i>Rhodamnia rubescens</i> (Scrub turpentine)	Recorded in targeted surveys in an existing transmission easement subject to ongoing disturbance.	Assess the potential for occurrence across the entire alignment.
<i>Rhodomirtus psidioides</i> (Native guava)	Recorded in targeted surveys in an existing transmission easement subject to ongoing disturbance.	Assess the potential for occurrence across the entire alignment.
<i>Thelymitra adorata</i> (Wyong sub orchid)	This species can occur in disturbed sites where exotic species and weedy grasses dominate.	Assess potential for occurrence in the Wyong IBRA subregion. Use information from the TBDC on geology, altitude and surrounding PCTs to justify exclusion of suitable habitat.



Figure 1. Orange rapid data point indicating presence of *Allocasuarina luehmannii*.

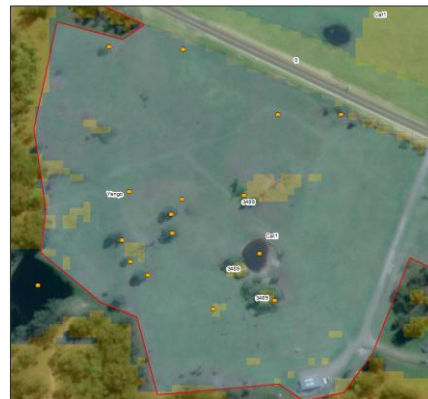


Figure 2. Areas mapped in the BDAR as Category 1 land despite the draft NVR Map identifying Category 2 land and rapid data points indicating native vegetation.



Figure 3. Example of land mapped as Category 2-Sensitive land (red shaded areas) and Category 2-Regulated land (yellow shading) that should not have been categorised as ‘excluded land’ within the disturbance footprint (red boundary)

Biodiversity assessment and data audit

Recommendation 2: address inconsistencies in the spatial data, BAM Calculator, and BDAR to ensure an accurate credit obligation is identified

- The spatial data, BDAR and BAM-C data are misaligned for some species (Table 2 and 3). Review species polygon disturbance areas and ensure all data sets align
- For species assumed to be present and where the unit of measure is ‘counts of individuals’, provide evidence-base (eg. based on reference sites or literature) for the estimates in the BDAR. These figures have been provided under Tables 8.14-8.16 and Tables 10.4-10.6 in the BDAR, but it is unclear how these have been calculated. Discrepancies between counts for all count species are shown in Table 4.
- Address inconsistencies in data for Hunter IBRA subregion – there are inconsistencies in vegetation zone and patch size areas presented in the BDAR, BAM-C, and spatial layers. This affects the biodiversity credits and the list of candidate species generated in the BAM-C
- Data in Table 4.79 of the BDAR, and data entered in the BAM-C, do not match the spatial data (ECO_WSP_FieldVerifiedVegetation_Dist_250623_GDA2020z56.shp)(Table 5)
- Section 4.4 of the BDAR states that all vegetation zones have been assigned a patch size of >100 ha. However, vegetation zone 3314_Poor records a patch size of 50 ha in both Table 4.79 of the BDAR and in the BAM-C. There are inconsistencies between patch sizes in Table 4.79 and the BAM-C for Hunter IBRA subregion. The following 6 vegetation zones have patch sizes of >100 ha in Table 4.79, but have patch sizes of 50 ha entered in the BAM-C: 3314_Thinned, 3314_Disturbed grasslands, 4431_Poor, 4015_Thinned, 4015_Derived, 4089_Poor

Table 2. Comparisons between fauna species polygons areas in the BDAR, spatial data and latest BAM-C credit report areas (dated 21/08/2025).

Species	Hunter (BDAR Table 8.16)			Wyong (BDAR Table 8.14)			Yengo (BDAR Table 8.15)			Total (BDAR Table 8.13)		
	BDAR	Spatial	BAM-C	BDAR	Spatial	BAM-C	BDAR	Spatial	BAM-C	BDAR	Spatial	BAM-C
Barking owl	13.75	13.76	-	15.55	15.56	15.55	7.34	7.34	7.34	36.64	36.7	22.89
Brush-tailed phascogale	90.41	90.39	86.68	-	-	-	-	-	-	90.41	90.39	86.68
Brush-tailed rock-wallaby	12.6	12.61	11.53	70.91	70.9	70.91	72.51	72.54	72.51	156.02	156.05	154.95
Common planigale	18.21	19.2	16	-	-	-	-	-	-	18.21	19.2	16
Eastern cave bat	75.72	79.14	56.83	109.78	109.77	107.76	198.27	198.27	196.93	383.77	387.19	361.52
Eastern pygmy possum	-	-	-	155.55	155.52	155.11	N/A	N/A	N/A	155.55	155.52	155.11
Gang-gang cockatoo	7.11	7.12	3.11	44.99	44.98	45.99	41.13	41.13	41.98	93.23	93.23	91.07
Hunter Valley Delma	223.04	258.29	223.03	-	-	-	-	-	-	233.04	258.29	223.03
Large-eared pied bat	78.38	81.81	0	203.63	206.72	198.77	224.35	227.79	224.35	506.36	516.33	423.12
Masked owl	12.36	12.37	7.45	4.75	4.74	4.75	24.97	24.98	24.97	42.08	42.09	37.17
Powerful owl	26.06	26.07	20.04	29.94	29.94	29.94	68.83	68.84	68.83	124.83	124.85	118.81
Southern myotis	117.69	142.41	73.73	-	-	-	2.56	2.58	2.56	120.25	144.97	76.29
Southern greater glider	41.66	41.65	31.44	208.44	208.43	208.44	227.02	227.02	226.95	477.12	477.09	466.83
South-eastern glossy black-cockatoo	6.92	6.93	3.11	16.18	16.19	16.18	46.4	46.4	46.4	69.5	69.52	65.69
Squirrel glider	217.88	217.87	205.8	208.44	208.43	208.44	221.3	221.29	221.3	647.62	647.58	635.54
Stephens banded snake	-	-	-	145.71	145.7	144.71	-	-	-	145.71	145.7	144.71

Note – the disturbance areas for the following species are consistent across all IBRA subregions: Giant barred frog, Giant burrowing frog, Koala, Littlejohn's tree frog, Long-nosed potoroo, Red-crowned toadlet, Regent honeyeater, Pale-headed snake, Parma wallaby, Sooty owl, Stuttering frog and Swift parrot.

Table 3. Comparisons between flora species polygons in the BDAR, spatial data and latest BAM-C credit report areas (dated 21/08/2025).

Species	Hunter (BDAR Table 8.16)			Wyong (BDAR Table 8.14)			Yengo (BDAR Table 8.15)			Total (BDAR Table 8.12)		
	BDAR	Spatial	BAM-C	BDAR	Spatial	BAM-C	BDAR	Spatial	BAM-C	BDAR	Spatial	BAM-C
<i>Acacia bynoeana</i>	9.77	9.78	9.74	-	-	-	-	-	-	9.77	9.78	9.74
<i>Acacia pendula</i>	16.92	20.26	4.78	-	-	-	-	-	-	16.92	20.26	4.78
<i>Asperula asthenes</i>	0.31	0.31	0.31	1.98	8.76	1.98	-	-	-	2.29	9.06	2.29
<i>Callistemon linearifolius</i> +	241	320	No*	205	215	205	-	-	-	446	535	205
<i>Commersonia rosea</i>	No	No	1.95	-	-	-	-	-	-	Not in Table	Not in Spatial	1.95
<i>Corybas dowlingii</i>	2.09	2.11	No*	9.28	21.06	9.28	-	-	-	11.37	23.17	9.28
<i>Cymbidium canaliculatum</i> +	23	22	1	-	-	-	No	0	No*	23	22	1
<i>Cynanchum elegans</i>	3.38	5.81	0.31	1.82	2.70	1.82	4.55	8.43	4.55	9.75	16.94	6.68
<i>Dendrobium melaleucaphilum</i>	-	-	-	-	-	-	-	-	-	Not in Table	Not in Spatial	-
<i>Dillwynia tenuifolia</i>	-	-	-	-	-	-	1.46	15.43	1.46	1.46	15.43	1.46
<i>Diuris tricolor</i>	26.56	42.93	20.25	-	-	-	-	-	-	26.56	42.93	20.25
<i>Eucalyptus camaldulensis</i>	3.3	3.30	1.5	-	-	-	-	-	-	3.3	3.30	1.5
<i>Eucalyptus castrensis</i>	0.21	0.21	No*	-	-	-	-	-	-	0.21	0.21	0
<i>Eucalyptus glaucina</i> +	888	1176	No*	-	-	-	288	1127	288	1176	2303	288
<i>Eucalyptus pumila</i>	11.91	15.91	7.52	-	-	-	5.77	22.53	5.77	17.68	38.44	13.29
<i>Grammitis stenophylla</i>	-	-	-	3.21	16.79	3.21	2.55	6.64	2.55	5.76	23.43	5.76
<i>Grevillea parviflora subsp. parviflora</i>	3.55	5.56	5.8	-	-	-	-	-	-	3.55	5.56	5.8
<i>Gyrostemon thesioides</i>	-	-	-	-	-	-	No	0.05	Excluded Tab 5	Not in Table	0.05	-
<i>Leionema lamprophyllum subsp. fractum</i>	-	-	-	-	-	-	No	1.43	No*	Not in Table	1.43	0
<i>Melaleuca biconvexa</i>	-	-	-	9.35	16.79	9.35	-	-	-	9.35	16.79	9.35
<i>Melaleuca groveana</i> +	419	720	No*	-	-	-	2923	2923	2923	3342	3643	2923
<i>Olearia cordata</i>	-	-	-	-	-	-	4.03	22.74	4.03	4.03	22.74	4.03
<i>Ozothamnus tessellatus</i>	7.69	16.35	12.2	-	-	-	-	-	-	7.69	16.35	12.2
<i>Persoonia hirsuta</i>	-	-	-	-	-	-	1.46	15.48	1.46	1.46	15.48	1.46
<i>Pomaderris queenslandica</i>	6.85	15.51	1.95	-	-	-	-	-	-	6.85	15.51	1.95

<i>Prasophyllum petilum</i>	30.99	49.38	20.25	-	-	-	-	-	-	30.99	49.38	20.25
<i>Prasophyllum wybong</i>	30.99	49.38	26.35	-	-	-	-	-	-	30.99	49.38	26.35
<i>Prostanthera cineolifera</i>	18.26	25.55	13.22	-	-	-	39.46	52.56	39.47	57.72	78.11	52.69
<i>Pterostylis chaetophora</i>	30.99	49.38	26.35	-	-	-	-	-	-	30.99	49.38	26.35
<i>Pterostylis gibbosa</i>	2.18	5.19	11.73	-	-	-	-	-	-	2.18	5.19	11.73
<i>Rhizanthella slateri</i>	-	-	-	7.66	25.30	7.66	1.79	3.37	1.79	9.45	28.66	9.45
<i>Rhodamnia rubescens</i> +	188	182	10	1354	1355	1354	852	710	852	2394	2247	2216
<i>Rutidosis heterogama</i>	13.32	15.35	11.32	0.9	0.90	0.9	1.46	15.43	1.46	15.68	31.67	13.68
<i>Senna acclinis</i>	-	-	-	5.95	16.79	5.95	-	-	-	5.95	16.79	5.95
<i>Syzygium paniculatum</i> +	15i	16	No*	468	840	468	30	30	30	513	885	498
<i>Tetratheca juncea</i>	-	-	-	2.85	10.69	2.85	-	-	-	2.85	10.69	2.85
<i>Velleia perfoliata</i>	-	-	-	-	-	-	4.02	22.53	4.02	4.02	22.53	4.02
<i>Zieria involucrata</i>	-	-	-	-	-	-	4.03	22.74	4.03	4.03	22.74	4.03

+ indicates count species

* identified as 'No (surveyed)' in the BAM-C

Note – the disturbance areas for the following species are consistent across all IBRA subregions: *Angophora inopina*, *Eucalyptus fracta* and *Rhodomyrtus psidioides*.

Table 4. Extrapolated count for assumed present count species based on area of the assumed species polygon (spatial data) and plants per hectare (see screenshot below).

Species/stems per ha	Hunter (BDAR Table 8.16)				Wyong (BDAR Table 8.14)				Yengo (BDAR Table 8.15)				Total (BDAR Table 8.12)			
	BDA R	Spatial	BAM -C	Total Count	BDA R	Spatial	BAM -C	Total Count	BDA R	Spatial	BAM -C	Total Count	BDA R	Spatial	BAM -C	Total Count
<i>Callistemon linearifolius</i> 50 stems/ha	241	6.41	No*	320	205	4.29	205	215	-	-	-	-	446	10.70	205	535
<i>Cymbidium canaliculatum</i> 1 stem/ha	23	21.73	1	22	-	-	-	-	No	0.09	No*	0	23	21.82	1	22
<i>Eucalyptus glaucina</i> 50 stems/ha	888	23.52	No*	1176	-	-	-	-	288	22.53	288	1127	1176	46.05	288	2303
<i>Melaleuca groveana</i> 124 stems/ha	419	5.81	No*	720	-	-	-	-	2923	23.57	2923	2923	3342	29.37	2923	3643
<i>Rhodamnia rubescens</i> 29 stems/ha	188	6.27	10	182	1354	46.71	1354	1355	852	24.50	852	710	2394	77.48	2216	2247
<i>Syzygium paniculatum</i> 50 stems/ha	15	0.31	No*	16	468	16.79	468	840	30	0.59	30	30	513	17.69	498	885

Note- 'Total Count' is the extrapolated count of individuals determined by multiplying the estimated stem density per ha (column 1) by the area of assumed presence from the spatial data

* identified as 'No (surveyed)' in the BAM-C

Table 5. Vegetation zones in Hunter IBRA subregion with inconsistent vegetation zone areas

Vegetation zone	Area (ha) in BDAR (Table 4.79) and BAM-C	Area (ha) in spatial data
3314 Disturbed grassland	20.02	28.47
3315 Derived	17.44	19.62
3431 Disturbed grassland	35.34	59.96
3636 Disturbed grassland	14.57	28.07
4015 Derived	2.21	3.75
4089 Derived	6.92	10.41
Total	96.5	150.28

Review BAM plot data and vegetation zones and update the BDAR, BAM-C and spatial data assessment and data audit

Recommendation 3: ensure consistency in vegetation zone areas and patch sizes between spatial data, the BDAR, and the BAM-C and address inconsistencies as identified

Inconsistencies in the BAM plot data in the BDAR and BAM-C include:

- BAM-C plot data for structure, function and composition is sometimes inconsistent with the raw floristic data
- plants listed in the floristic plot data have not been identified to species, are duplicated, or contain descriptive information rather than a scientific species name making it unclear if the correct growth form has been allocated. At a minimum ensure all species are identified to genus (species where possible) and assigned to the correct growth form
- benchmark data has been incorrectly entered (e.g. benchmark data in the Yengo BAM-C for PCTs 3239 & 3489)
- Some BAM plots have a litter score of zero. Litter cover plots have not been included in the raw data, only the average has been provided
- BAM plots have been allocated to PCTs in the BDAR however the raw BAM plot data has not been included in Appendix D of the BDAR (e.g. DL-03, DL-19, DL-27, DL-51, HTP-MS-53, Q46)
- inconsistencies with references to BAM plots in Section 4.2 and Tables 4.77-4.79. BAM plots DL-79 and DL-50 have been entered into the Hunter IBRA subregion BAM-C case for PCT 4015 'Derived', although Section 4.2 of the BDAR allocates DL-27 and DL-50 to this vegetation zone
- BAM plot DL-27 is absent from Appendix D and BDAR Tables 4.77-79, but present in the data package (plot to PCT tool and BAM plot data spreadsheet). The BAM plot entered into the BAM-C, DL-79, is listed in Appendix D and BDAR Table 4.79 but is absent from BDAR section 4.2 and the plot to PCT tool
- BAM plots have been undertaken but not included in the assessment. For example, BDAR Section 4.2 states PCT 4039 'Mod-good' relies on BAM plots DL-41 and DL-51, however only DL-41 has been entered into the BAM-C
- BAM plots have been undertaken and referred to in the BDAR but benchmark data has been entered into the BAM-C (e.g. DL-03, DL-19, DL-20, TS-18, DL-61)
- Review and update BAM plot data to ensure consistency across the BDAR and BAM-C and ensure benchmark data is correctly applied
- Review the vegetation chapter and update all inconsistencies with BAM plot and PCT references including Tables 4.77-4.79
- Update Table 2.2 to include all BAM plot data collected outside the subject land. Ensure justification for use is provided for each plot as per Remote Access Guidance

Correct current and future VI scores in the BDAR

Recommendation 4: Review and update VI scores in Table 8.7 for 'before development' and total clearing areas, and reflect agreed approach to calculate partial loss in 'after development' VI scores in Table 8.7

Errors were identified with VI scores in Table 8.7 of the BDAR (3250 mod-good, 3581 mod-good) when compared against the BAM-C for the before-development scenario. A detailed review of 'after development' scores where partial loss is proposed has not been undertaken due to outstanding queries from CPHR on the approach to calculate partial loss and errors found during the data analysis.

Address Lowland Rainforest NSW North Coast and Sydney Basin Bioregion EEC

Recommendation 5: Further consider and explain if PCT 3029 meets the alliances of the Lowland Rainforest NSW North Coast and Sydney Basin Bioregion Endangered Ecological Community (EEC), considering the characteristic species present on site and comparing against paragraph 2 of the NSW Threatened Species Scientific Committee final determination

Avoid and Minimise

Recommendation 6: Method for reducing offset obligations from reduced impacts during construction or operation (micro-siting) need to be finalised and documented

This will need to address:

- Clearing cannot exceed the clearing limits within the BDAR
- The BDAR should clarify proposed micro-siting will be confined to the biodiversity study corridor.
- A maximum micro-siting distance.
- The micro-siting methodology should identify a hierarchy of avoidance to biodiversity values

Section 7.2 of the BDAR states that monitoring and tracking of the total predicted clearing value against the limits will occur during construction. If an increase in clearing values leads to biodiversity impacts which exceed that assessed in the BDAR a modification to the project approval (if approved) is triggered. Parameters to be monitored are to be described. It is expected that monitoring will be tracked per vegetation zone.

Recommendation 7: Mitigation measures should be revised to include disturbance within a PCT representative of an EEC or CEEC to be prioritised in areas with a VI score of <15, and include the avoidance prioritisation framework referred to in B2 point 3 in the BDAR

Mitigation measure B2 in Table 8.28 of the BDAR states that as part of avoidance of threatened species, threatened ecological communities, and particularly entities at risk of SAIL, disturbance will be prioritised in areas with a vegetation integrity score of <17 as per section 9 of the BAM (2020). This measure should be expanded to include PCTs representative of an EEC or CEEC with a VI score of <15.

Mitigation measure B2 refers to developing and mapping a hierarchy of biodiversity constraints to provide an overarching avoidance prioritisation framework to inform detailed design and the Biodiversity Management Plan. This framework should form part of the BDAR.

Prescribed and Indirect Impacts

Recommendation 8: Ensure indirect impacts are adequately assessed

- Clarify how indirect impacts have been incorporated into the direct impacts, as stated in section 8.2.1 of the BDAR, and ensure indirect impacts are considered for all areas of vegetation to be retained in disturbance areas B and HZ
- Identify indirect impacts from construction and maintenance activities on retained vegetation within disturbance areas B and HZ in Table 8.19 of the BDAR. Describe the likely vegetation removal techniques and processes to allow a better understanding of impacts associated with areas of partial loss
- Address the risk of increased public access to the transmission easement including illegal dumping and taking of firewood from areas currently not easily accessible to the public in Table 8.19. Identify the high-risk areas, if any, and how this risk will be mitigated

Indirect impacts for disturbance area B and HZ where partial loss will occur are incorporated into the direct impact calculation in section 8.1 of the BDAR. Clearing activities have the potential to impact retained vegetation through removal of felled vegetation, weed and pest incursion and use of herbicides. Clearing techniques and processes have not been well described, making it difficult to quantify the impacts in disturbance areas B and HZ.

Recommendation 9: Address impacts of powerlines on threatened birds and bats

- Update Table 8.28 to include the post-approval bird collision and EMF management and monitoring plan to identify priority areas for installation of mitigation measures, commit to install line markers in high collision risk areas and implement a robust monitoring program to assess ongoing risks.
- Update Table 8.19 and Section 8.2 to include an assessment of impacts to Grey-headed Flying Foxes. The National Recovery Plan (NRP) for Grey-headed Flying Fox identifies electrocution from power lines as a threat (Tidemann 1999, Tidemann and Nelson 2011).
- Include mitigation measures to manage residual impacts

Rather than proposing an additional 10% credit obligation for specific species include a commitment to effective mitigation measures for those species. Identify locations at high risk of threatened bird and bat strike in the BDAR and document management actions to reduce impacts. Appendix I of the BDAR recommends establishing a monitoring program to determine risk - this is to be added to Table 8.28 of the BDAR. Monitoring is to occur for at least two years post-construction and be designed to identify collision rates and areas where additional deterrents may need to be installed.

Recommendation 10: Prescribed impacts on habitat connectivity should be considered

- Prescribed impacts assessment should be updated to demonstrate that connectivity has been considered for all relevant species, including for species such as Littlejohn's Frog and Giant Burrowing Frog.
- Update the BDAR with detail on species for which connectivity measures are designed; location of connectivity measures and the type of connectivity measure proposed (i.e. rope crossing, glider pole).
- Update the BDAR to include reference to compensatory habitat and species targeted.

Rather than proposing an additional 10% credit obligation for specific species include commitment to strong mitigation measures for those species likely to be impacted by a loss of connectivity. This should be included in the Connectivity Strategy proposed in Table 8.28. While the strategy will be completed in the post-approval phase, associated mitigation measures and any compensatory measures should form part of the BDAR.

Recommendation 11: Prepare a biodiversity management plan prior to commencement of operation to address the ongoing maintenance to ensure mitigation measures proposed in the BDAR are implemented. The requirement for a biodiversity management plan should be included as an approval condition in the determination.

Mitigation measure B17 states that guidelines and procedures will be developed and implemented as part of the Network Operator's environmental management system which include management of vegetation maintenance and areas of high biodiversity value. These are to identify the ongoing maintenance of disturbance area B and HZ; mitigation measures specific to HTP such as those relating to connectivity, nest boxes and other measures to reduce threatened bird and bat strike.

A biodiversity management plan is to be developed to ensure the ongoing risks to biodiversity throughout operation identified in the BDAR are mitigated.

Private land conservation agreements

Recommendation 12: Where impacts to private land conservation agreements are unavoidable consult with the BCT.

The development footprint overlaps with areas mapped on the NSW Private Land Conservation Agreements spatial layer, including Saddlers Creek Conservation Area and Broke Road Offset Area. Prioritised avoidance of these areas and, if avoidance cannot be achieved, discuss with BCT.

Matters of National Environmental Significance

Recommendation 13: Include relevant information on MNES

- Update the MNES assessment in Appendix C of the BDAR to provide all information required to complete the bilateral assessment as provided in Attachment B
- Enter all EPBC Act listed TECs into the BAM-C and ensure credit obligations are consistent between the BDAR, Appendix C and BAM-C
- Provide additional assessment in the BDAR for all ten (10) Commonwealth listed TECs associated with the PCTs within the alignment. Demonstrate that relevant Commonwealth listing advice was used when mapping the extent of MNES in this assessment
- Consider all relevant Commonwealth guidelines and policy statements that are applicable to the action and listed threatened species and/or communities. Where they are listed for the species in the SPRAT database, they must be considered, including:
 - National Recovery Plan for the Regent Honeyeater (*Anthochaera phrygia*)
 - Survey Guidelines for Australia's Threatened Birds. EPBC Act survey guidelines 6.2 (Department of the Environment, Water, Heritage and the Arts (2010))
 - Threat abatement plan for predation by feral cats (Department of Climate Change, Energy, the Environment and Water (2024)).
 - extent of Warkworth Sands Woodland of the Hunter Valley CEEC may be underestimated – this CEEC abuts areas identified as PCT 0. Should PCT 0 be revised and a PCT assigned in a derived grassland condition, a 30 m buffer is to be applied to these Warkworth Sands patches as per Commonwealth guidelines
- Prepare an AoS for all impacted MNES, including those assumed present and/or listed under the Controlled Action – an AoS is required for any MNES being impacted, including species where presence is assumed and those listed under the controlled action as possibly at risk of being significantly impacted, including *Acacia bynoeana* (Bynoe's Wattle) *Thelymitra adorata* (Wyang Sun Orchid)
- Provide further consideration of bird and Grey-headed flying fox species habitat fragmentation in Appendix C including potential collision with the transmission lines. The corridor is around 140 metres wide, and has the potential to change flight paths and fragment habitat
- Where minimum condition thresholds for Commonwealth listed Threatened Ecological Communities (TECs) under the relevant listing advice has been met, these are correctly allocated in Tab 3 of the BAM-C.

Flood risk management and surface water assessment¹

Recommendation 14: Prepare detailed flood management plans for all construction sites and access tracks. These must include staging of works, scour protection, sediment and erosion controls, and stabilisation of crossings

¹ In preparing this advice CPHR has reviewed the following documents:

- *Hunter Transmission Project Environmental Impact Statement, EnergyCo, August 2025*
- *Hunter Transmission Project Technical report 12 Flooding impact assessment, Lyall & Associates, August 2025*
- *Secretary's Environmental Assessment Requirements – Hunter Transmission Project (SSI-70610456)*

Ancillary sites (laydown areas, construction support sites, helipads) and access tracks are located on flood-affected land. Inundation up to 2.5 m is possible at some sites (e.g. Bayswater South, Gouldsville Road, Wollombi Road A, Freemans Drive).

Risks include obstruction of local overland flow, mobilisation of sediments and materials, and safety hazards for the construction workforce.

The EIS acknowledges these risks and proposes standard measures (staging of works, scour protection, sediment and erosion controls, stabilisation of crossings), but more detailed flood management planning will be required at detailed design.

Recommendation 15: Incorporate scour protection and structural measures for towers in high-velocity areas, to be confirmed during detailed design.

Transmission line towers generally have a small footprint and are not expected to significantly alter flood behaviour. However, towers located near the Hunter River, Wollombi Brook and Monkey Place Creek will require scour protection and structural design to withstand high depth/velocity flooding.

Recommendation 16: Incorporate stormwater basins, scour protection and a 0.5 m freeboard for all switching station and substation platforms. Confirm appropriate mitigation at Eraring substation in consultation with Origin Energy.

Switching stations and the Eraring substation extension are not within mainstream floodplains but are subject to major overland flow. Diversion channels, culverts, and a 0.5 m freeboard above the 1% AEP are proposed. There is potential for increased inundation depth upstream that could affect the Eraring Power Station.

There is residual risk of increased flow velocities downstream of Bayswater South and Olney switching stations, requiring scour protection and stormwater basins at outlets.

Attachment B – Bilateral assessment information and data (MNES matters)

The BDAR should include the following information:

1. Background and description of action should include:

1. operational and construction footprints of the project that relate to MNES and provide the relevant maps
2. staging and timing of the action that may impact on MNES and provide the relevant maps
3. maps of the subject land boundary showing the final proposal and disturbance footprint with regards to MNES
4. GIS shapefiles of all maps that relate to MNES.

2. Landscape context of the MNES

The section on establishing the site context should include all content required under Section 3 of the BAM in relation to MNES.

3. EPBC Act listed threatened species and communities

1. demonstrate that field-based survey effort meets survey guidelines and, where available, Commonwealth survey guidelines
2. demonstrate supporting databases have been accessed and used (e.g. NSW BioNet Vegetation Classification, NSW BioNet Threatened Biodiversity Data Collection, NSW BioNet Atlas, Commonwealth Species Profile and Threats Database search results)
3. demonstrate published peer-reviewed literature has been accessed and used
4. demonstrate local data has been accessed and used (if relevant)
5. demonstrate all EPBC Act-listed threatened species and communities have been appropriately mapped in accordance with the relevant Commonwealth listing advice
6. demonstrate important populations and critical habitat as defined in Approved Listing Advice, Approved Conservation Advice and Recovery Action Plans have been considered
7. provide a list of all EPBC Act listed threatened species and communities that occur on the subject land, or in the vicinity (including species that are 'ecosystem credits' in BAM)
8. include a discussion, with data and analysis where any species and communities identified by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) referral documents have been ruled out as occurring on or near the subject site.

4. Avoidance, minimisation, mitigation and management

1. Demonstrate all feasible alternatives and efforts to avoid and minimise impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) has occurred including an analysis of alternative:
 - a. designs and engineering solutions
 - b. modes or technologies
 - c. routes and locations of facilities
 - d. sites within the subject site
 - e. the identification of any other site constraints in determining the location and design of the proposal (such as bushfire protection requirements, flood planning levels, servicing constraints, etc).

2. Include a discussion and justification of all feasible measures to avoid, mitigate and/or manage impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including:
 - a. techniques, timing, frequency and responsibility
 - b. identify measures for which there is risk of failure
 - c. evaluate the risk and consequence of any residual impacts
 - d. any adaptive management strategy proposed to monitor and respond to impacts.

5. Impact assessment

1. Identify the residual adverse impacts likely to occur to each EPBC Act listed threatened species and/or community after the proposed avoidance and mitigation measures are taken into account.
2. Justify and provide evidence for the predicted level of impact, with reference to the Commonwealth's 'Significant Impact Guidelines 1.1 - Matters of National Environmental Significance'² and DPIE's 'Guidance to Assist a Decision- Maker to Determine a Serious and Irreversible Impact'³.
3. Provide a summary table with the following information:

Name of EPBC Act listed entity	Nature & consequence of impact (direct & indirect)	Duration of impact (e.g. construction, operation, life of project)	Quantum of impact	Consequence of impact (local, state & national scales)	Impact requires offsetting? (significant or not)

4. Provide data and justification where any EPBC Act-listed threatened species or communities to be considered in the BDAR are considered to be at low risk of impact during the assessment.

6. Offsets for MNES

1. Identify any MNES that have not been assessed for offsetting using the BAM.
2. Provide details of how impacts requiring offset correlate to the MNES impacts.
3. Provide details on the PCTs that require offsetting and the number and type of ecosystem credits required for impacts to MNES.

²<https://www.dcceew.gov.au/environment/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance#:~:text=This%20Significant%20impact%20guidelines%20provide,and%20Biodiversity%20Conservation%20Act%201999.>

³<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf>

Attachment C – EnergyCo letter on BDAR revisions and issue resolution

EnergyCo



Ref: DOC25/754599
10 September 2025

Louisa Mamouney
Executive Director,
Planning, Offsets, Ecosystems and Threatened Species Division
Department of Climate Change Energy Environment and Water

Re: Hunter Transmission Project – BDAR Revisions and Issue Resolution

Dear Louisa,

Thank you for your detailed comments on the Draft Hunter Transmission Project Biodiversity Development Assessment Report (BDAR). We acknowledge the importance of the issues raised and value the constructive relationship our teams have developed in progressing the environmental assessment.

EnergyCo is committed to addressing all residual matters outlined in your correspondence of 2 September 2025. These matters include resolving:

- vegetation mapping and BAM plot data issues
- survey effort and polygon mapping for threatened species
- assessment of serious and irreversible impacts
- assessment of partial loss
- application of avoidance and minimisation measures
- application of the remote assessment guide.

To support this, we have scheduled sessions with your team and our accredited assessor. The aim is to use this time to support finalising the BDAR and reach practical and timely resolutions.

Key issues raised prior to EIS exhibition include recommendations on the assessment of native vegetation, threatened species, SAll and avoid and minimise. The outcomes will be included in the updated Response to Submissions BDAR, providing an agreed approach to closing out these issues.

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1

We are committed to a collaborative and transparent approach with CPHR as the HTP, a priority transmission infrastructure project, progresses. Our objective is for the Hunter Transmission Project to set the standard for issue resolution and joint delivery that can be applied across future Renewable Energy Zone projects.

EnergyCo looks forward to finalising the BDAR with you in a way that maintains public confidence, meets regulatory requirements, and enables timely delivery of this important project.

Sincerely,



Ash Albury

Executive Director
Planning & Communities

Attachment D – Abbreviations

ALUM	Australian Land Use Management
BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BC Act	<i>Biodiversity Conservation Act 2016</i>
BC Regulation	<i>Biodiversity Conservation Regulation 2017</i>
BCT	Biodiversity Conservation Trust
BDAR	Biodiversity Development Assessment Report
Category 1 land	Category 1-Exempt land under LLS Act (draft NVR map)
Category 2 land	Category 2-Sensitive Regulated or Vulnerable Regulated land under the LLS Act (draft NVR map)
CEEC	Critically Endangered Ecological Community
CPHR	Conservation Programs, Heritage and Regulation Group
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DNG	Derived Native Grassland
EIS	Environmental Impact Statement
EMF	Electrical and magnetic fields
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
HZ	Hazard tree zone
IBRA	Interim Biographic Regionalisation for Australia
IGGAM	Interim Grasslands and other Groundcover Assessment Method
LLS Act	<i>Local Land Services Act 2013</i>
LLS Regulation	<i>Local Land Service Regulation 2014</i>
MNES	Matters of National Environmental Significance
NVR Map	Native Vegetation Regulatory Map
NPWS	National Parks and Wildlife Service
NVR	Native Vegetation Regulatory (map)
PCT	Plant Community Type
RTS	Response to Submissions
SAII	Serious and Irreversible Impacts
SEARs	Secretary's Environmental Assessment Requirements
TBDC	Threatened Biodiversity Data Collection
TEC	Threatened Ecological Community
AoS	Assessment of Significance
VI score	Vegetation Integrity Score