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6 July 2023

Ann Cunningham
Chairperson, Development Assessment Panel
North East Wind Development Major Project
Tasmanian Planning Commission
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Email: tpc@planning.tas.gov.au

Dear Ms Cunningham

NORTH EAST WIND DEVELOPMENT MAJOR PROJECT REPRESENTATION IN RELATION TO DRAFT ASSESSMENT CRITERIA UNDER \$60ZL(2) OF THE LAND USE PLANNING AND APPROVALS ACT 1993

I am writing in response to your letter of 26 June 2023, in which you advised that the Development Assessment Panel (the Panel) for the North East Wind Development Major Project has prepared draft assessment criteria, and gave notice of the exhibition of the draft assessment criteria, in accordance with section 60ZL(I) of the Land Use Planning and Approvals Act 1993 (LUPAA).

The Environment Protection Authority (**EPA**) has undertaken a review of the draft assessment criteria on behalf of the Board of the Environment Protection Authority (**the Board**) and is making a representation under section 60ZL(2) of LUPAA as outlined in this letter and in Attachment 1.

Requirement for the Major Project Impact Statement (MPIS) to be informed by the Board's guidance under section 60ZC(6) of LUPAA

The draft assessment criteria require the MPIS to be informed by the Board's guidance under section 60ZC(6) of LUPAA in relation to matters addressed in the following sections of the draft assessment criteria: 3.2 Social and environmental management practices (which includes consideration of air emissions and odour); 4.2 Biodiversity and ecology; and 4.4.3 Water quality, groundwater and acid sulfate soils.

I note that the Board's guidance will also be relevant to several other matters including those addressed in the following sections of the draft assessment criteria: 2.1 Renewable energy; 4.4.1 Operational noise and sound; 4.5.4 Geoconservation; and 4.6 Land use and coastal values. The EPA considers that the draft assessment criteria should be amended to clarify that the MPIS is required to be informed by the Board's guidance in relation to all relevant matters.

In addition, the draft assessment criteria state that the MPIS can only be informed by the Board's guidance in relation to the level of assessment required and the process for undertaking environmental assessment. In doing so, the draft assessment criteria appear to be limiting the statutory powers of the Board under section 74(4) of Environmental Management and Pollution Control Act 1994 (EMPCA).

As my staff have discussed previously with the Tasmanian Planning Commission, the Board's guidance under section 60ZC(6) of LUPAA will set out the information base that the Board requires the proponent to establish in order for the Board to undertake its assessment. It is therefore critical that the MPIS is informed by



the Board's guidance in order to establish a sufficient information base for decision-making by the EPA Board in accordance with section 74(9) of EMPCA.

While parts of the draft assessment criteria do appear to broadly cover some of the matters and 'guidance on information' requirements in the EPA's Assessment Requirement Notice (**ARN**), the draft assessment criteria lack the detail that is required by the EPA Board to form the information base for their assessment. Specific examples of this lack of detail are outlined in Attachment I.

The concept of 'adverse effects'

I note that in drafting the criteria, the Panel has generally adopted phrasing which refers to the concept of 'adverse effects'.

Under EMPCA, where the Board undertakes an environmental impact assessment of a proposal, it must seek to further the objectives prescribed in Schedule I of EMPCA, and in doing so determine what, if any, constitutes 'acceptable impact on the environment' for that proposal. While 'adverse effects' are referred to in Schedule I of EMPCA, it is the broader framework of 'acceptable impact on the environment' which the Board will ultimately provide advice to the Panel regarding the North East Wind Development, within the Major Project assessment process.

It is unclear at this stage how the concept of 'adverse affects' will translate for the purpose of the Board's obligations under EMPCA and under LUPAA.

If you wish to discuss any matters raised in this correspondence, please contact Catherine Browning, Senior Environmental Officer, on (03) 6165 4542 or Ella Jackson, Senior Environmental Officer, on (03) 6165 4515.

Yours sincerely

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Wes Ford

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Attachment 1: North East Wind Development Major Project – EPA representation in relation to draft assessment criteria under s60ZL(2) of LUPAA

 $^{^{1}}$ Noting that in accordance with section 60ZC(8) of LUPAA, the Board's ARN, as altered, if at all, by an alteration notice under section 60ZL(4) of LUPAA, will be taken to be guidance that the EPA Board has provided to the proponent for the purposes of section 74(4) of EMPCA, provided that the Board has considered the draft assessment criteria in accordance with section 60ZC(7) of LUPAA.

Attachment I: North East Wind Development Major Project – EPA representation in relation to draft assessment criteria under s60ZL(2) of LUPAA

	Development Assessment Panel draft assessment criteria	EPA Representation
1.	2. Policy context and strategy, 2.1 Renewable energy ²	Section 2.1 of the draft assessment criteria does not contain any guidance on information or require the MPIS to be informed by the Board's guidance under section 60ZC(6) of LUPAA. In addition, the draft assessment criteria do not require:
		 an estimate of greenhouse gas emissions, energy production and energy consumption to be provided for the construction and operational phases of the proposal to be provided;³ or the proponent to demonstrate that the proposal will implement cost-effective greenhouse best practice measures to achieve ongoing minimisation of greenhouse gas emissions.⁴
		If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
2.	3. Design and management, 3.2 Social and environmental management practices ⁵	Air quality The draft assessment criteria only mention air emissions once, under the 'context' heading in section 3.2. The reference is to "air emissions including dust, vehicle emissions and odour". Although section 3.2 of the draft assessment criteria requires the MPIS to be informed by the EPA Board's guidance under section 60ZC(6) of LUPAA, this is only in relation to the level of assessment required and the process for undertaking environmental assessment. In addition, the draft assessment criteria:
		 refer to adverse social and environmental affects, but not to loss of amenity to sensitive receptors, health impacts and the potential to cause environmental harm or nuisance⁶;

² Refer to Matters to be included in Assessment Criteria, Part 14. Greenhouse gas emissions and Schedule 2 - Information to be provided in the MPIS in addressing the matters identified in this Notice, Part 14. Greenhouse gas emissions of the Board's ARN

³ Refer to Schedule 2, Part 14.1.2 of the Board's ARN

⁴ Refer to Schedule 2, Part 14.1.3 of the Board's ARN

⁵ Refer to Matters to be included in Assessment Criteria, Part 7. Air emissions, Part 16. Decommissioning and Schedule 2 - Information to be provided in the MPIS in addressing the matters identified in this Notice, Part 7. Air emissions, Part 16. Decommissioning of the Board's ARN

⁶ Matters to be included in Assessment Criteria, Part 7 of the Board's ARN

Development Assessment Panel draft assessment criteria	EPA Representation
	 do not appear to contain any requirement to assess existing air quality, identify and/or locate air emission constituents of concern or sources of air emissions, identify and locate sensitive receptors, or deploy dust deposition monitors;⁷ do not refer to, or require the proponent to assess air emissions with consideration of, the Tasmanian Environment Protection Policy (Air Quality) 2004.8
	It is noted that several on-site quarries and batching plants are proposed and as such, it is important that the potential environmental impacts (including air emissions) from these ancillary activities are addressed in the MPIS. At a minimum, the Panel should be satisfied that any extractive activities will comply with the <u>Quarry Code of Practice</u> and require the proponent to address the environmental impacts of these activities in the MPIS.
	If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
	Decommissioning
	The draft assessment criteria refer to decommissioning as a matter to be addressed in relation to the potential for adverse effects, however detail is lacking as to how the MPIS should address potential impacts of decommissioning of wind turbines on the project land to ensure stabilisation of surfaces and rehabilitation of vegetation and natural values, such that the environment is protected, and environmental degradation prevented.
	A conceptual Decommissioning and Rehabilitation Plan for the proposal should be provided in the MPIS including: scenarios for end-of-life of the proposal including forecast proposal lifespan and potential future site use; proposed staging and methodology for decommissioning of equipment on site, with potential for re-use elsewhere; and proposed methodology for rehabilitating the site for appropriate future re-use, with consideration of the potential for restoration or enhancement of natural values?
	If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.

Schedule 2, Parts 7.1, 7.2 and 7.3 of the Board's ARN
 Schedule 2, Part 7.3 of the Board's ARN
 Schedule 2, Part 16.1 of the Board's ARN

	Development Assessment Panel draft assessment criteria	EPA Representation
3.	4.2 Biodiversity and ecology ¹⁰	Although section 4.2 of the draft assessment criteria requires the MPIS to be informed by the Board's guidance under section 60ZC(6) of LUPAA, this is only in relation to the level of assessment required and the process for undertaking environmental assessment.
		Section 4.2 of the draft assessment criteria states that an assessment of light impacts that has regard to the National Light Pollution Guidelines for Wildlife including Marine Turtles, Seabirds and Migratory Shorebirds, Commonwealth of Australia 2000 must be included in the MPIS. The only other reference to light impacts is in section 4.2.3 of the draft assessment criteria and relates to 'other listed flora and fauna species'. Section 4.2.3 of the draft assessment criteria states that it excludes key species and other avian species that are dealt with under section 4.2.1 of the draft assessment criteria and defines 'other listed flora and fauna species' as including flora and fauna that are threatened species under the Threatened Species Protection Act 1995 (TPSA) or the Environment Protection and Biodiversity Conservation Act 1999 (EPBCA).
		Section 4.2.3 goes onto state that the MPIS must address the potential for the proposal to cause adverse effects on 'other listed flora and fauna' due to acoustic disturbance or disruption to normal behaviours caused by lighting. It is therefore unclear the extent to which the proponent is required to assess lighting impacts on key species and other avian species under section 4.2.1, which are excluded from section 4.2.3 of the draft assessment criteria.
		Although section 4.2 of the draft assessment criteria requires a broader assessment of light impacts, there is little guidance provided on the detail that this assessment must include. As such the following requirements appear to be missing from the draft assessment criteria:
		 detail regarding proposed lighting, infrastructure, lighting regimes, positioning and lighting type during different project stages¹¹; consideration of proximity to avian breeding grounds;¹² and consideration of the potential for short-tailed shearwater (Ardenna tunuirostris) collisions.¹³
		In relation to marine and aquatic natural values, it is noted:

10 Refer to Matters to be included in Assessment Criteria, Part 1. Avian fauna, Part 2. Non-avian fauna, Part 3. Flora, vegetation communities and reserved areas, Part 4 Aquatic natural values, Part 5. Marine and coastal natural values and Schedule 2 - Information to be provided in the MPIS in addressing the matters identified in this Notice, Part 1. Avian fauna, Part 2. Non-avian fauna, Part 3. Flora, vegetation communities and reserved areas, Part 4. Aquatic natural values, Part 5. Marine and coastal natural values of the Board's ARN

¹¹ Schedule 2, Parts 1.1.4.1 and 5.1.6.1 of the Board's ARN

¹² Schedule 2, Part 1.1.4.1 of the Board's ARN ¹³ Schedule 2, Part 1.1.4.3 of the Board's ARN

	Development Assessment Panel draft assessment criteria	EPA Representation
		 section 4.2 of the draft assessment criteria refers to the requirement to undertake surveys in accordance with the NRE Tas Survey Guidelines for Terrestrial Developments, but no mention is made of the NRE Tas Survey Guidelines for Estuarine and Marine Developments; 14 there is no requirement in section 4.2 or 4.2.3 of the draft assessment criteria (or elsewhere in the draft assessment criteria) to identify areas or habitats of conservation significance, including designated conservation areas, areas relating to the requirements of international treaties (e.g., Japan-Australia and China-Australia Migratory Bird Agreements (JAMBA/CAMBA) and Ramsar (wetlands) Convention) 15; sections 4.2 and 4.2.3 of the draft assessment criteria mention lighting, vessels, and acoustic disturbance, all of which have the potential to impact on marine and aquatic natural values however, other potential impacts appear to have been omitted from the draft assessment criteria including physical impacts from pile driving and blasting and any associated underwater noise (e.g., temporary or permanent threshold shift in marine fauna species) during the construction of the wharf facility 16; potential impacts on aquatic species from waterway crossings, dams or flow have only been briefly addressed in section 4.2.3 of the draft assessment criteria and may require further detail or clarification. 17 If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
4.	4.2 Biodiversity and ecology, 4.2.1 Key species 18	Section 4.2.1 of the draft assessment criteria appears to define key species as Tasmanian wedge-tailed eagle, white-bellied sea eagle, Tasmanian devil and spotted-tail quoll. While impacts on these species are likely to require specific consideration in the MPIS, the basis on which the Panel has identified and defined key species is unclear and should be explained or clarified in the draft assessment criteria. The link to the Forest Practices Authority, Fauna Technical Note 1 – Eagle Nest Management provided under 'Guidance on Information' in section 4.2.1 of the draft assessment criteria is to an outdated version and should be replaced with a link to the updated Technical Note 1 – Eagle Nest Management published in April 2023. Additionally, the EPA's Guide to Eagle Nest Searching and Nest Activity Checks was published in May 2023 and is applicable to this assessment.

 $^{^{14}}$ Schedule 2, Parts 5.1.1 and 5.1.2 of the Board's ARN 15 Schedule 2, Parts 4.1.3 and 5.1.4 of the Board's ARN

¹⁶ Refer to Schedule 2, Part 5.1.5.2 of the Board's ARN

¹⁷ Refer to Schedule 2, Part 4.1.4 of the Board's ARN for example, which details a range of more detailed potential impacts on aquatic values.

¹⁸ Refer to Matters to be included in Assessment Criteria, Part I. Avian fauna, Part 2. Non-avian fauna and Schedule 2 – Information to be provided in the MPIS in addressing the matters identified in this Notice, Part I. Avian fauna, Part 2. Non-avian fauna of the Board's ARN

	Development Assessment Panel draft assessment criteria	EPA Representation
		The draft assessment criteria require the Panel, when assessing the proposal, to consider the potential for collision or forcing species to the ground due to turbulence, including consideration of observed or modelled utilisation and flight behaviours in the project land, rates of collision at comparable Tasmanian sites and the worst-case scenario and likely scenarios for eagle deaths in any given year over the life of the project. Other than this, the draft assessment criteria do not provide further detail in relation to specific or minimum requirements for utilisation surveys, collision risk modelling or GPS tracking of eagles. ¹⁹ In particular, the requirement for eagle utilisation surveys to be undertaken across two years is not mentioned in the draft assessment criteria. Although it may be appropriate to review findings of eagle utilisation surveys after one year for sites located within highly dynamic landscapes (e.g. active forestry areas) that require a variety of utilisation methods to be employed, the requirement for utilisation surveys to be carried out over two years has been applied to most other wind farms in Tasmania on the basis that eagle utilisation of a site is known to vary from year to year.
		In addition, the draft assessment criteria appear to lack detail about Collision Risk Modelling requirements, ²⁰ collision management and monitoring, ²¹ and carcass management. ²² The draft assessment criteria do not appear to require the MPIS to include an Avian Mortality Monitoring Plan ²³ or detail how non-detection will be compensated for. ²⁴ Although section 3.2 of the draft assessment criteria requires the proponent to analyse the effectiveness of any avoidance or mitigation strategies proposed to be employed, there is no requirement for the proponent to undertake this assessment at the site (emphasis added) or for this assessment to be informed by results from their use at existing wind farms, particularly in the Tasmanian context. ²⁵
		If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
5.	4.2 Biodiversity and ecology, 4.2.2 Other avian fauna ²⁶	Section 4.2.2 of the draft assessment criteria defines 'other avian fauna species' as birds that are listed threatened species under the TSPA and EPBCA, excluding the key species identified in section 4.2.1. Consideration should be given to whether this definition is consistent with regulatory and reporting requirements for wind farms in Tasmania under EMPCA and permitting requirements under the <i>Nature Conservation (Wildlife) Regulations 2021</i> . Section 4.2.2 of the draft assessment criteria goes on to

¹⁹ Refer to Schedule 2, Parts 1.2 and 1.4 of the Board's ARN

²⁰ See for example, Schedule 2, Part 1.5 of the Board's ARN ²¹ Refer to Schedule 2, Parts 1.7 and 1.8 of the Board's ARN

²² Refer to Schedule 2, Part 1.9 of the Board's ARN

²³ Refer to Schedule 3 of the Board's ARN

²⁴ Refer to Schedule 2, Part 1.8 of the Board's ARN

²⁵ Refer to Schedule 2, Part 1.6.1 of the Board's ARN

²⁶ Refer to Matters to be included in Assessment Criteria, Part 1. Avian fauna and Schedule 2 – Information to be provided in the MPIS in addressing the matters identified in this Notice, Part I. Avian fauna of the Board's ARN

	Development Assessment Panel draft assessment criteria	EPA Representation
		refer to rates of collision at comparable Tasmanian sites, the veracity of collision data at comparable Tasmanian sites, and cumulative effects from the Musselroe Wind Farm. It is noted that collision data at comparable sites will include a wider range of avian fauna species than those species defined by the draft assessment criteria.
		If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
6.	4.4 Amenity and pollution, 4.4.1 Operational noise and sound ²⁷	It is noted that the EPA Noise Specialist has reviewed section 4.4.1 of the draft assessment criteria and provided comments to assist with the preparation of this representation.
		Section 4.4 of the draft assessment criteria does not require the MPIS to be informed by the Board's guidance, as required in other sections of the draft assessment criteria.
		Prior to August 2020 the Board endorsed the use of the New Zealand Standard NZ6800 Acoustics – Wind farm noise (NZS 6808), for wind turbine noise limits, applying a 40 dB(A) or background +5 dB(A) whichever was the greater, consistent with the NZS 6808. However, following its meeting on 4 August 2020, the Board agreed to adopt as policy a lower wind energy project noise limit of 35 dB(A) or background + 5 dB(A), whichever is the greater, at residences or land zoned for sensitive uses, for wind energy projects. This policy position was based on a review of other jurisdictions' approaches to setting noise limits for wind energy projects, and advice at the time from the former National Wind Farm Commissioner that an appropriate level for a consistent noise limit would be 35dB(A) LA90 10 min or background noise plus 5dB(A), whichever is greater, measured outside of the residence. It is also noted that the Board's policy position is consistent with the Independent Scientific Committee on Wind Turbines recommended wind turbine noise limit of 35dB(A) to ensure minimal possible annoyance, as outlined in the Australian Energy Infrastructure Commissioner 2022 Annual Report. ²⁸
		The draft assessment criteria require the sound output of operating wind turbines to comply with the requirements of the NZS 6808 but do not require the MPIS to have regard to the Board's policy. The cumulative effect from the existing Musselroe Wind Farm and proposed North East Wind Development should comply with NZS 6808 and the noise limit specified in EPA Board's policy (35 dB(A) or background + 5 dB(A), whichever is the greater).
		The draft assessment criteria outline several 'sound output' levels as follows:

²⁷ Refer to Matters to be included in Assessment Criteria, Part 6. Noise and vibration emissions and Schedule 2 – Information to be provided in the MPIS in addressing the matters identified in this Notice, Part 6. Noise and vibration emissions of the Board's ARN

²⁸ Australian Energy Infrastructure Commissioner, 2022 Annual Report, Available at: https://www.aeic.gov.au/sites/default/files/documents/2023-06/aeic-2022-annual-report.pdf

Development Assessment Panel draft assessment criteria	EPA Representation
	 the operating sound output from substations and energy storage systems is to achieve a maximum level of 35dB Leff at habitable buildings on land that is not part of the site; and the sound output of operating wind turbines at habitable buildings that may be used for sensitive uses, on land that is part of the wind farm site, is to comply with a maximum level of 45dBA.
	In relation to these 'sound output' levels:
	 as per NZS 6808 and the Board's ARN, stated noise limits are applicable to wind farm sound levels measured at a noise sensitive location and as such, introducing 'sound output' as a new term or concept is not useful or appropriate; it is unclear why noise limits for operating wind turbines are only applicable at habitable buildings on land that is part of the wind farm site, and not for buildings or sensitive uses that are located on land that is not part of the wind farm site (i.e. a noise limit for operating wind turbines that will apply to sensitive uses on land outside of the wind farm site does not appear to have been specified); it is unclear why noise limits for substations and energy storage systems are applicable only at habitable buildings on land that is not part of the site (i.e. a noise limit for substations and energy storage systems that will apply to sensitive uses on land that is part of the wind farm site does not appear to have been specified); the basis for the 45dBA noise limit is unclear, noting that there is no reference to 45 dBA in NZS 6808 or the Board's policy. The assessment criteria should outline a justification for choosing 45 dB LA90 (10min) for noise sensitive uses/receptors on land that is part of the wind farm site and confirm whether and how this noise limit relates to any written agreement between the proponent and these receptors; the statement about operating sound output from substations and energy storage systems appears to be incorrect because (1) the LA90 descriptor is used for noise limits stated in NZS 6808 whereas, the Lamax noise limit is generally used to assess impact noise; (2) Leff (effective) noise level is a term that is used only in Victoria and should not be used to assess the noise impacts of proposals located in other states; (3) As per section 2.6 of NZS 6808, sound levels shall be reported in the format 'value dB symbol', for example, 35 dB LA90(10 min); if separate noise limits for wind turbines and
	It is also unclear why the draft assessment criteria introduces 'habitable buildings' as a new term or concept. As per NZS 6808, noise limits apply to 'noise sensitive locations' as defined in section 2.4 of NZS 6808. The draft assessment criteria also refer to 'sensitive uses'. It is noted that the terms 'sensitive uses' and 'habitable buildings' are defined in the Tasmanian Planning Scheme and that 'noise sensitive premises' is another term that is often used by the Board when drafting permit conditions and

	Development Assessment Panel draft assessment criteria	EPA Representation
		undertaking environmental impact assessment. The draft assessment criteria should define the terms used to provide clarity to the proponent and participating regulators.
		The draft assessment criteria state that an assessment should be undertaken of whether a high amenity noise limit is applicable under section 5.3 of NZS 6808. The EPA understands that the high amenity noise limit referred to in the draft assessment criteria relates to a recommendation in the NZS 6808 to apply a more stringent limit during the evening and night-time of 35dB or 5dB more than background sound level, whichever is the greater, for high amenity areas. High amenity areas are defined in New Zealand by local authorities who identify in district plans, the need to provide a higher degree of protection of acoustic amenity for specific areas.
		The Board, when developing its policy in August 2020, acknowledged that the New Zealand concept of high amenity areas is difficult to apply in the Tasmanian context as we do not have similar areas defined in the Tasmanian Planning Scheme. Similar difficulties have also arisen in Victoria as acknowledged in the Australian Energy Infrastructure Commissioner 2022 Annual Report. ²⁹ Greater clarity should be provided in the draft assessment criteria about the intent of the requirement to assess whether a high amenity noise limit is applicable under section 5.3 of the NZS 6808 and how the Panel expects the proponent to undertake this assessment.
		Some of the references in the draft assessment criteria to the Tasmanian Environment Protection Policy (Noise) 2009 are incorrect. For example, the acoustic indicator levels in the Environment Protection Policy (Noise) 2009 are not relevant when assessing wind farm noise.
		If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
7.	4.4 Amenity and pollution, 2.2.3 Shadow flicker	The draft assessment criteria require the development to be designed so that the modelled blade shadow flicker impact at existing residential dwellings does not exceed 30 hours per year of (emphasis added) ³⁰ 30 minutes per day. In addition, the draft assessment criteria require the proponent to include in the MPIS, an assessment of shadow flicker informed by the principles of, and processes outlined in, Appendix E of the <i>Draft National Wind Farm Development Guidelines</i> , 2010.
		The draft assessment criteria should also require the MPIS to have regard to the <u>Australian Energy Infrastructure Commissioner</u> , 2022 <u>Annual Report</u> and Appendix 5 of the <u>Clean Energy Council Best Practice Guidelines for Implementation of Wind Energy Projects in Australia, June 2018</u> including, but not limited to:

²⁹ Australian Energy Infrastructure Commissioner, 2022 Annual Report, Available at: https://www.aeic.gov.au/sites/default/files/documents/2023-06/aeic-2022-annual-report.pdf
³⁰ There appears to be a typographical error in section 4.4.2 of the draft assessment criteria in that it currently states "30 hours per year of 30 minutes per day"; it is assumed the Panel intended this to state "30 hours per year or 30 minutes per day".

	Development Assessment Panel draft assessment criteria	EPA Representation
		 the recommendation by the Australian Energy Infrastructure Commissioner that an appropriate standard in the Australian context could be a limit of no more than a total 15 hours of actual shadow flicker per year received at a residence and no more than 30 minutes of shadow flicker should be experienced on a given day; the recommendation by the Australian Energy Infrastructure Commissioner that neighbours experiencing or likely to experience shadow flicker that is annoying, should be provided with the opportunity for having visual screening installed; and the objective that shadow flicker does not detrimentally affect the amenity of nearby landowners.
		The MPIS should also consider the extent to which shadow flicker may cause environmental nuisance to sensitive receptors including nearby landowners, noting the proximity of the proposal to townships and communities such as Tomahawk.
8.	4.4 Amenity and pollution, 4.4.3 Water quality, groundwater and acid sulfate soils ³¹	Although section 4.4.3 of the draft assessment criteria requires the MPIS to be informed by the Board's guidance, this is only in relation to the level of assessment required and the process for undertaking environmental assessment. **Acid sulfate soils** Section 4.4.3 of the draft assessment criteria refers to the *Tasmanian Acid Sulfate Soils Management Guidelines, 2009, however the requirement to develop an initial acid sulfate soil management plan consistent with these Guidelines, and the *Commonwealth Acid Sulfate Soils Guidelines**, has been omitted 32. The draft assessment criteria refer to the degree of risk of erosion, sedimentation, and PASS and the capacity to avoid adverse effects through design and siting, however detail is lacking as to how the MPIS should address these risks, summarised as follows:
		 Analysis as to whether Potential Acid Sulfate Soils (PASS) may be present and potentially disturbed as a result of construction, including at a minimum, a desktop assessment of the potential for disturbance of acid sulphate soils (ASS) taking into consideration; soil profiles including test pit and bore log data; geology, hydrogeology and geomorphology; detail of proposed construction methodology, footprint, the depth and volume of structure footings, and the extent of disturbance; construction methods and any associated dewatering; the time period over which sub surface materials are likely to be exposed; any groundwater extraction proposed and associated drawdown; and initial geochemical testing in areas where PASS may be disturbed.³³

³¹ Refer to Matters to be included in Assessment Criteria, Part 5. Marine and coastal natural values, Part 9. Potential acid sulfate soils, Part 10. Surface and coastal water quality, Part 11. Hydrogeology and groundwater quality and Schedule 2 - Information to be provided in the MPIS in addressing the matters identified in this Notice, Part 5. Marine and coastal natural values, Part 9. Potential acid sulfate soils, Part 10. Surface and coastal water quality, Part 11. Hydrogeology and groundwater quality of the Board's ARN

³² Refer to Schedule 2, Part 9.1.4.1 of the Board's ARN
33 Refer to Schedule 2, Part 9.1.1 of the Board's ARN

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	 Analysis of receptors and risk to receptors due to disturbing PASS, during and following construction and the potential consequences of disturbance and the evaluation of their significance, including consideration of water quality, natural values, and karst systems.³⁴ Proposed management and mitigation measures for minimising impacts of PASS during construction and long-term use/operation, including potential volumes of ASS that may require management, the storage, monitoring and disposal of PASS and ASS, such as the management of excavated soil which may contain PASS and the management of intersected groundwater, groundwater ingress and groundwater drawdown where acid sulfate soils may be present, and detailed disposal options for excavated PASS and ASS including any significant onsite or off-site disposal location and the disposal method.³⁵
	Surface and coastal water quality
	With the exception of the State Policy on Water Quality Management 1997 (SPWQM 1997), section 4.4.3 of the draft assessment criteria does not refer to relevant state guidelines and guidance documents in relation to surface water quality, including the following:
	 the relevant default guidelines values published by the EPA; the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018 (ANZG2018) which identify environmental values for protection and toxicant guideline values; the Environmental Management Goals for Tasmanian Surface Waters, Dorset & Break O'Day Municipal Areas, November 2005; the Tasmanian Conservation of Freshwater Ecosystem Values database; the Technical Guidance for Water Quality Objectives (WQOs) Setting for Tasmania, August 2020; and in accordance with up-to-date, best practice erosion and sediment control principles, Best Practice Erosion and Sediment Control, IECA 2008.
	The following additional comments are also made relation to surface and coastal water quality in the draft assessment criteria:
	 there is no requirement to refer to the above guidelines and guidance documents to determine receiving water values noting that, at a minimum, relevant default guidelines values published by the EPA, and the ANZG2018 toxicant guideline values should be referred to (and noting that justification for the proposed emission of contaminants to

 $^{^{34}}$ Refer to Schedule 2, Parts 9.1.2 and 9.1.3 of the Board's ARN 35 Refer to Schedule 2, Parts 9.1.4 to 9.1.4.7 of the Board's ARN

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		 surface waters should be provided in accordance with the principles under the SPWQM 1997 and with application of a 'weight of evidence approach' consistent with the ANZG2018); there is no requirement to provide an initial erosion and sediment control plan in which the potential for mobilisation of sediment for each significant construction element and/or environmental setting is identified, and mitigation measures detailed in accordance with best practice erosion and sediment control principles such as Best Practice Erosion and Sediment Control, IECA 2008; there is no requirement to develop, where merited, monitoring programs to determine baseline, ecosystem condition, water quality and potential water quality impacts; and there is no requirement to discuss rehabilitation of disturbed areas following the completion of construction activities and cessation of the activity in relation to receiving water bodies.
		Coastal water quality is not addressed in section 4.4.3 of the draft assessment criteria and is instead included under section 4.6.3 of the draft assessment criteria, noting that section 4.6.3 does not require the MPIS to be informed by the Board's guidance.
		Hydrogeology and groundwater quality
		Hydrogeology of the proposed project site and potential impacts on hydrogeology have not been included in any relevant section of the draft assessment criteria. Although groundwater quality has been addressed in section 4.4.3 of the draft assessment criteria, detail is lacking as to how the MPIS should address hydrogeology and groundwater quality, summarised as follows:
		 provision of a conceptual groundwater model for the project land indicating local and regional aquifer flows and including how construction footprints and any proposed groundwater extraction or dewatering may interact with existing hydrogeology³⁶; identification of existing groundwater bores nearest to the area impacted by the activity with reference to the Groundwater Information Portal including details of any baseline groundwater quality monitoring³⁷; provision of yield and volumes for any proposed groundwater extraction, or the process for bore establishment and management³⁸; and

³⁶ Refer to Schedule 2, Part 11.1.1 of the Board's ARN
³⁷ Refer to Schedule 2, Part 11.1.2 and 11.1.4 of the Board's ARN
³⁸ Refer to Schedule 2, Part 11.1.5 of the Board's ARN

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		 proposed mitigation measures in relation to changed groundwater quality or flow, including proposed controls to prevent migration of contaminants to groundwater at any storage locations for potentially contaminating materials³⁹.
		If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
9.	4.6 Land use and coastal values, 4.6.1 Land use compatibility,	Section 4.6.1 of the draft assessment criteria require the Panel to consider the extent to which the proposal may confine or constrain agricultural use, and to have regard to advice or information from managers and owners of land within the project area. The MPIS should also include an assessment of the extent to which noise, blade rotation and shadow flicker impacts from wind turbines may impact on apiaries, as well as horses, cattle, sheep and other livestock.
10.	4.6 Land use and coastal values, 4.6.3 Coastal processes and geomorphology ⁴⁰	Section 4.6 of the draft assessment criteria does not require the MPIS to be informed by the Board's guidance, as required in other sections of the draft assessment criteria including section 4.4.3 in relation to water quality, groundwater and acid sulfate soils. The draft assessment criteria refer to the protection of natural features and processes of coastal systems, and the quality and productivity of marine waters and biota, to an acceptable level, however detail is lacking as to how the MPIS should address potential impacts of the proposal on coastal processes, coastal natural values and coastal water quality, summarised as follows:
		 a comprehensive hydrological study of the coastal zone to assess potential impacts of the proposed wharf construction to the geomorphology of the coast and marine environment within the project land;⁴¹ impacts on marine or coastal natural values, including consideration of habitat clearance or disturbance, noise impacts from pile driving, blasting and or light pollution, mobilisation of potential acid sulfate soils, and cumulative impacts with the Musselroe Wind Farm and necessary transmission infrastructure resulting from the proposal⁴²;

³⁹ Refer to Schedule 2, Part 11.1.8 of the Board's ARN

⁴⁰ Refer to Matters to be included in Assessment Criteria, Part 5. Marine and coastal natural values, Part 9. Potential acid sulfate soils, Part 10. Surface and coastal water quality, Part 11. Hydrogeology and groundwater quality and Schedule 2 - Information to be provided in the MPIS in addressing the matters identified in this Notice, Part 5. Marine and coastal natural values, Part 9. Potential acid sulfate soils, Part 10. Surface and coastal water quality, Part 11. Hydrogeology and groundwater quality of the Board's ARN

⁴¹ Refer to Schedule 2, Part 5.1.4 of the Board's ARN ⁴² Refer to Schedule 2, Part 5.1.5 of the Board's ARN

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		 undertake and provide the results of marine and coastal natural values surveys in the vicinity of the proposed project, details of the survey efforts, timing and assessment of the adequacy of surveys, and information detailing known/recorded population and known or potential habitat⁴³; consistent with the SPWQM 1997 and ANZG2018, determine surface water bodies that may potentially be impacted by the proposed activity during construction and operation, the community values of those water bodies, relevant water quality guidelines values for the protection of those values, and potential impacts to water quality as a result of the proposal⁴⁴.
		The assessment criteria also do not contain the requirements outlined in the table above in row 8 under surface and coastal water quality, which are equally applicable to coastal processes and geomorphology. If the MPIS does not address the matters identified in Schedule 2 of the Board's ARN, the MPIS is unlikely to form a sufficient
		information base for decision making by the Board in relation to the proposal in accordance with section 74(9) of EMPCA.
11	Appendix A – Development Plans, Base Information	Clarification of the meaning of the following statement in the draft assessment criteria should be provided – "concentric spheres showing at an approximate distance from the footprint of wind turbines at 1km intervals for 4km beyond the project."

⁴³ Refer to *NRE Tas Survey Guidelines for Estuarine and Marine Developments.*⁴⁴ Refer to Schedule 2, Part 10.1.1 to 10.1.1.6 of the Board's ARN