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Victorian Government

Department of Energy, Environment and Climate Action (DEECA)

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Managing the biodiversity impacts of renewable energy

AGL Energy (AGL) welcomes the opportunity to provide feedback to the Victorian Government's consultation on proposed guidance to better manage biodiversity impacts of renewable energy projects in Victoria, specifically the Draft Handbook for the development of renewable energy in Victoria (Draft Handbook) and associated Discussion Paper.

Proudly Australian since 1837, AGL delivers around 4.5 million gas, electricity, and telecommunications services to our residential, small and large business, and wholesale customers across Australia. AGL operates the largest electricity generation portfolio in Australia of any ASX-listed company, with a total operated generation capacity¹ of 7,982 MW as of 30 June 2024. Since 2006, AGL has invested billions of dollars in the construction and delivery of over 2 GW of renewable and firming capacity in the National Electricity Market.

We support Australia's ambition to achieve net zero by 2050 and believe this will underpin the competitiveness of the Australian economy. As the global community responds to the risks of climate change, AGL recognises the large part that we must play in the transition to a low carbon economy. Our 2022 [Climate Transition Action Plan](#) outlines AGL's ambition for decarbonisation, including targets for new firming and renewable assets, and commitments to repurpose our large thermal generation sites into integrated industrial energy hubs.

With operations across multiple states, AGL has significant experience in developing renewable projects, as well as with the regulatory obligations under both state and federal legislation to carry out comprehensive environmental assessments of the potential impacts of these projects on nature. Our [Biodiversity Policy](#) outlines our commitments to preserving biodiversity and the natural landscape at our sites.

AGL is very supportive of Victoria's targets of reaching 65% renewable energy by 2030 and 95% by 2035, as well as its goal of net zero emissions by 2045. Decarbonisation of the electricity sector will play a critical and large role in decarbonising the economy and strong action is required to accelerate investment in new renewable generation and storage. A collaborative effort from government, industry and the community will be required to accelerate the rollout of renewables while balancing the need for positive social and environmental outcomes.

We welcome the Victorian Government providing more guidance around managing the impacts of renewable energy projects on biodiversity. More clarity around species most at risk and managing the impacts to these species will provide assurance that renewables are being built with sound mitigation practices. It's important that a balanced approach is taken to ensure that the guidelines do not result in unintended consequences, and that they allow for the efficient rollout of renewable energy, which has long-term benefits for nature and the climate.

¹ FY24 installed capacity is the AEMO registered capacity, also taking into account the three 25MW upgrades to the Bayswater Power Station Units 4, 2 and 3 in FY20, FY22 and FY23 respectively.



This submission's key points are summarised as follows:

- **Policy and regulatory certainty are required to reduce investment risk and provide industry with confidence to invest in renewable energy projects.**
- **A balanced and sensible approach should be taken to reduce impacts from renewable energy on the environment and biodiversity, while ensuring that renewable energy, which has long-term benefits for the climate and nature, is rolled out at pace.**
- **Consideration should be given to a project's actions beyond the development footprint of that project and its contribution to achieving state or regional nature positive goals.**
- **Transitional arrangements for the application of the proposed guidelines are necessary, with community and industry engagement essential to ensure that various stages of project planning, assessment and approval have been considered.**
- **Victorian biodiversity and nature objectives should be aligned with those at a national level. We encourage the Victorian Government to collaborate with the Federal Government on environmental reforms to align objectives.**
- **We support science-based decision making and encourage guidance based on the gathering of biodiversity data (private and public) to guide the adaptive management of renewable energy projects.**
- **The ongoing gathering of data and management to enhance the biodiversity values should be community-led and involve all land users.**
- **Consultation with Traditional Owners is essential to identify and manage impacts of renewable energy project development on culturally significant species.**
- **Governments must work closely together to avoid duplication in obligations between existing regulations and new guidance at both a state and federal level.**

This submission addresses the questions outlined in the Discussion Paper in more detail in Appendix A. We look forward to further engagement on proposed guidance, including application of this guidance to other renewable energy in the future, to obtain the best outcome for industry, communities and the environment.

Should you have any questions in relation to this submission, please contact Casey Barkla-Jones at cbarkla@agl.com.au.

Yours sincerely,

AGL Energy

Appendix A – AGL’s Responses to the Discussion Paper

Question No.	Question	AGL Response
Commencement and transitional provisions for new guidance		
1	Do you think there should be delayed commencement for the guidance and/or transitional provisions? Please outline what you think should be applied.	AGL supports transitional arrangements for the application of the proposed guidelines. Timely implementation of the guidance is required to provide industry with certainty; however, this needs to be balanced with ensuring that the guidelines are practical and don't result in unintended consequences. Any proposed changes should be in close consultation with stakeholders prior to rollout, to provide sufficient certainty to proponents in project planning and implementation. Community and industry engagement will be essential to ensure that transitional arrangements support implementation of any new policy or guidance in a way that considers different stages of project planning, assessment and approval. Projects that have already started assessment and approval processes should be captured by transitional arrangements, as significant investment has been made in these projects on the basis of existing regulatory requirements or interim guidelines. Proponents with existing projects already under assessment should have the option to 'opt-in' to the new guidelines should they choose to do so.
Principles to guide the application of the draft Handbook		
2	Do you agree with the list of draft principles? If not, which principles would you add or remove? Please specify.	AGL broadly agrees with the principles set out in the Draft Handbook. However, we consider there to be some inconsistencies amongst the principles and it's unclear how they will be applied in practice. Where we have specific comments on principles, this has been outlined below: Principle 1: this is more of an overarching statement than a principle. We suggest that it be reworded to 'Renewable energy is a key contributor to achieving Victoria's emissions reduction targets, which is critical to the medium and long-term security of biodiversity and reducing the impacts of climate change'. We suggest removing the reference to renewable energy targets as we do not believe it is needed in this context. Principle 2: we agree with this principle and add that the Victorian Government should work closely with the Federal Government to prioritise and sufficiently resource regional strategic planning, focusing on the prioritisation of areas with the least impact on biodiversity. This would ideally be facilitated by reforms to Federal environment laws. Principles 3 & 4: We agree with these principles but advise the government to consider linking them to the Federal Government's 'offset policy principles' Principle 5: A science-based approach should be taken to the 'no net loss' objective to ensure that all factors impacting a species (e.g. land clearing, predation by feral cats and foxes) are considered, not only impacts from renewable energy. Consideration should also be given to avoid duplication of authority and processes between federal and state governments. Principle 9: we find this principle to be inconsistent with Principle 3. Principle 9 explicitly refers to species of concern, however, Principle 3 references the mitigation hierarchy applying to ALL biodiversity impacts, not just species of concern. We recommend rewording this principle to consider all biodiversity impacts.

		More broadly, we urge the government to consider linking these principles to the Global Biodiversity Framework and federal biodiversity objectives, and ensure consistency with state and federal biodiversity principles.
Defining the goal for managing species impacts		
3	Do you agree with the proposed objective that a proponent must ensure that their renewable energy development will result in no net loss to any species of concern identified as being present? If not, which objective is more appropriate? Please specify.	AGL is supportive of ambition to minimise impacts to biodiversity and achieve 'no net loss' to species of concern from a renewable energy project's development. However, it is unclear exactly what 'no net loss' means in the context of a project's development and operation and how a project developer would demonstrate 'no net loss' in practice. We urge the government to provide further specific guidance. We note that the Federal Government reforms to the EPBC Act looks to move beyond 'no net loss' to the ambition of 'nature positive'. For consistency and clarity, we encourage the Victorian Government to collaborate with the Federal Government on environmental reforms to align objectives. We also note in the Discussion Paper that DEECA considers the 'no net loss' objective to be a minimum. We believe that this should be explicitly stated in the Draft Handbook and that 'net positive' should be encouraged. The proposed Draft Handbook lacks clarity around how the 'species of concern' list will be managed and how often it will be updated. Additionally, it's unclear whether species would be retrospectively added if another project recorded mortalities. If new species are added retrospectively, project timeframes may be impacted if project developers are required to undertake species-specific surveys later in the approval process or post-approval. We understand that DEECA is developing a tool to help proponents identify species that may be impacted in a particular area.
Traditional Owner and First Nations species of cultural significance		
4	Specific question for Traditional Owner Corporations and First Nations people - How should species of importance to First Nation's people be protected?	
Threatened Species not on the list of species of concern		
5	Should species that are not listed as 'threatened' under the FFG or the EPBC be considered as part of this guidance? If so, please explain.	AGL supports a science-based assessment approach to determine if species should be included in the guidance. We note that the Discussion Paper focuses on species of concern, ensuring that assessments and approvals are targeting measures to manage impacts to species most at risk. This approach seems sensible and strikes a balance between ensuring no significant impacts to biodiversity while encouraging faster assessment and approval processes for renewable energy that has long-term environmental benefits from reduced emissions. Consultation with Traditional Owners is essential to identify and manage impacts to culturally significant species. However, it's important to avoid duplication in obligations between existing regulations, Cultural Heritage Management plans and new guidance at both a state and federal level.

Proposed Risk Criteria		
6	Do you agree with the proposed risk criteria? If not, are there specific risk criteria you don't think should apply or other criteria that should be considered? Please specify.	We support the intention of the risk criteria to provide proponents with an idea of the risk factors for consideration and attention, and to ensure that proponents take necessary steps to minimise the risk profile of developments early in siting and design. However, we note that industry has ongoing concerns and queries around the criteria, and more broadly the guidelines, which will need to be addressed to ensure that the risk criteria don't result in unintended consequences.. We concur with feedback provided during the DEECA briefing in December 2024 that the risk table on page 8 of the Draft Handbook is confusing – a Yes response to criteria 1 would be positive while a Yes for Criteria 2 and 3 would be negative in assessing level of risk. We recommend that phrasing of criteria should be consistent so proponents can clearly understand the results of the risk assessment. Regarding Criteria 3 of the Draft Handbook, one of the risk considerations stated is 'the information and data provided by the proponent fails to meet any requirements or methodology published by DEECA. This is consistent with applying the precautionary principle'. AGL notes that some species survey methodologies may not be practicable; sometimes species are surveyed outside of regular species windows, with expert advice to support survey data. It is unclear how methodologies outside of those published by DEECA feature in the risk assessment process. We would appreciate further clarification on this. We also note that on page 8 of the Draft Handbook that proponents are encouraged to engage with DEECA as early as possible in the design and planning process to understand which risk category their project may fall into and options for minimising risks. We would welcome further clarification on the timing of this engagement e.g. whether proponents need to engage at site selection where a high risk rating would impact the ability to obtain approval. It is also important that the risk criteria consider all species that may be at risk of impact in the local area, regardless of whether they are formally listed as threatened. There may be a small community of a species in a local area not listed as threatened that may need to be monitored. We emphasise the need for an adaptive framework, providing a flexible approach to managing biodiversity risks that emphasises continuous learning, adaptation, and improvement.
Approach to offsets / compensation measures		
7	Do you agree with the proposed approach to offsetting residual impacts on species through the use of compensatory measures? If not, why?	AGL is supportive of an approach that includes consideration of the mitigation hierarchy with offsets to be used as a last resort. This is aligned with commitments in AGL's Biodiversity Policy. However, we don't believe that all potential mitigation measures outlined in the Draft Handbook are necessary. If avoidance and minimisation measures have been implemented effectively, there should be little risk of significant impacts to species of concern, and therefore additional measures of potential high financial cost would not be warranted. Should any significant impacts to species of concern be identified under the Bat and Avifauna Management (BAM) plan's monitoring program for a particular site, mitigation measures and offsetting should then be applied. Should developers be required to implement mitigation measures in all cases, this could add substantial costs to projects for little positive impact to species of

		concern. Numerous bird surveys in Victoria, including those for AGL's Oaklands Wind Farm², have indicated that avoidance and minimisation measures, such as avoidance of high biodiversity value sites and avian flight corridors, under robust planning provisions result in minimal impact to species of concern. Global studies have shown that while there are avian mortalities as a result of wind farms, these figures are dwarfed by those as a result of other causes such as feral cats and building windows³. While steps should be taken to avoid impacts to species of concern, and all species more generally, we have concerns that onerous standards that only the renewable energy industry is subject to, may impact project lead times and further slow the renewable energy rollout – risking achievement of Victoria's renewable energy and emission reduction targets. A balanced and sensible approach should be taken to reduce impacts from renewable energy on the environment and biodiversity, while ensuring that renewable energy, which has long-term benefits for the climate and nature, is rolled out at pace. Any approach taken to offsets and compensation measures should be guided by the Commonwealth Government's approach and aligned with international best practice. Additionally, compensation should be implemented 'like-for-like' with ecological equivalence and made in a local area needing restoration attention. This encourages local groups to participate, leveraging local knowledge and experience in managing the impacted environment. Should culturally significant species be impacted by renewable energy development, consultation with Traditional Owners is essential to align to compensation terms. Cultural Heritage Management plans must identify risks and impacts and outline how they will be managed by the project proponent/operator with First Nations input. It's important to avoid duplication in obligations between existing regulations, Cultural Heritage Management plans and new guidance at both a state and federal level. Compensation should only be considered as a last resort if impacts are not able to be avoided and managed, as species of cultural significance may not be able to be compensated for in terms of loss. Where possible, case studies should be drawn from to inform the management and protection of species of cultural significance.
8	What could an alternative offsetting approach look like?	State and federal environmental assessment frameworks currently focus on potential impacts on threatened species or habitat within the boundary of the project, excluding consideration of any project actions taken that result in positive biodiversity contributions. We also note that there is an increasing focus on 'nature positive' both internationally and domestically. To incentivise best practice conservation, consideration should be given to a project's actions beyond the development footprint of that project and its contribution to achieving state or regional nature positive goals. Careful consideration needs to be given to guidance material outlining expectations to developers on how to avoid and mitigate harm, with industry input to ensure that they are sensible and don't have unintended consequences.
9	Should the amount of indirect compensation, such as funding species research, be limited? If yes, what could be an appropriate limit	Compensation levels should reflect the assessed level of risk, which should be based on scientific evidence that defines the level of risk/harm to a species and should be guided by scientific studies. Indirect compensation should be considered on a case-by-case basis, with research programs being targeted to better manage and mitigate risk to the particular species in question.

² [Oaklands Wind Farm Bird and Bat Mortality Monitoring report, 2021](#)

³ [Full article: The avian and wildlife costs of fossil fuels and nuclear power](#)

	as a percentage of total compensation?	
10	Are there actions that should not be permitted as a compensatory measure?	
11	Should DEECA be primarily responsible for the delivery of compensation measures? If not, why?	AGL believes that delivery of compensatory measures should remain with the developer/operator, with guidance and recommendations from DEECA as applicable. Compensation measures are already considered as part of the assessment and approval process for renewable energy projects. Any government-led compensatory framework, where proponents are required to financially contribute to a fund that is used by government to deliver compensatory outcomes for species of concern, needs to be effectively designed with clear frameworks and oversight in place to ensure funds are effectively contributing to biodiversity conservation. A report by the NSW Audit Office identified a number of issues with the NSW Biodiversity Offset Scheme, including, but not limited to: ineffective scheme design with no clear strategy, lack of safeguards against potential conflicts in role of the Biodiversity Conservation Trust, and lack of transparency and concerns around integrity.⁴ Should a compulsory fund be developed in Victoria, it is essential that there be transparency around where funds are allocated.
Monitoring, reporting and adaptive management		
12	Do you agree that BAM Plans should continue to be recommended for all onshore wind energy facilities? If not, why? If yes, do you support the publication of a 'template' for all future BAM Plans?	AGL supports BAM Plans continuing for all onshore wind facilities as we have found these to be effective mechanisms for avoiding and minimising significant impacts to species of concern. However, there is need for consistency in of BAM Plans across industry (including for example; format, requirements, conditions) which allows for comparable data. We therefore are very supportive of DEECA producing a template for future BAM Plans to provide consistency and clarity to developers and operators of what is expected for renewable projects. We look forward to input in the development of such template. As stated in our response to question 7 above, we don't believe that all potential mitigation measures outlined in the Draft Handbook are necessary. If avoidance and minimisation measures have been implemented effectively, there should be little risk of significant impacts to species of concern, and therefore additional measures of potential high financial cost would not be warranted. Should any significant impacts to species of concern be identified under a BAM plan's monitoring program for a particular site, mitigation measures and offsetting should then be applied.
13	Do you prefer a government-led monitoring and reporting program? Why?	AGL's preference is for the current developer-led approach to monitoring, reporting and adaptive management, rather than a government-led approach. Developers have deep experience with BAM Plans and there are various other mechanisms available to help guide industry. While we see some merit to a government-led approach from the perspective of potentially gaining better understanding of cumulative impacts in areas where wind farms operate, we have some concerns around potential additional costs that operators may need to bear.

⁴ [Effectiveness of the Biodiversity Offsets Scheme](#), Audit Office of NSW

		The current developer-led approach, together with the development of a template BAM Plan to help guide industry and provide certainty of adaptive management measures upfront, is our preferred approach.
Species-specific guidance		
14	Do you have any concerns with the preferred policy approach?	We recommend that a suite of measures should be applied to minimise risk to species of concern, as opposed to blanket buffers. Some flexibility should be afforded within buffer areas provided that impacts can be managed. The Brolga guidelines should provide well-defined definitions on different wetland types and should clearly support detailed site-based investigations including hydrological modelling.
15	Are there other mitigation measures that should be considered to avoid and minimise potential impacts to Brolga flocking and breeding success?	
16	It is proposed that proponents will have to rely on various information to inform known breeding sites. This includes Brolga breeding records and observations. Are there additional criteria to consider whether a Brolga breeding record can be accepted as a current known breeding site?	Permanently drained wetlands or waterbodies such as farm dams that may be drained for designated agricultural purposes should not be considered suitable habitat for Brolga breeding and nesting.
17	Local knowledge is an important source of information to identify known breeding sites and inform field surveying. What has your experience been with community engagement and consultation, and what inclusions or recommendations could improve the gathering of local knowledge and information?	There is a role for industry to be proactive in collaborating with other developers, universities and communities to share ecological data relating to species likely to be impacted. This could help increase our understanding of the risks to biodiversity as well as the mitigation measures likely to be most successful for future projects. However, there are inherent challenges with sharing information between different proponents from both a commercial aspect as well as project timing consideration. Data sharing protocols may help address these challenges.
18	Are there compensatory measures listed that should be reconsidered and removed from the list of compensation options?	

Proposed Bat Guidelines		
19	Do you agree that there is a need for Bat-specific guidance for onshore windfarms in Victoria?	Yes, in the absence of guidelines there is uncertainty for proponents in terms of project investment and development. We recommend close collaboration between state and federal governments when devising such guidelines to reduce duplication, complexity and cost, while promoting certainty for proponents and communities. Proponents should have the flexibility to use a combination of strategies to minimise residual risk using the mitigation hierarchy.
20	Are there other species or groups of species that should also have specific guidance prepared for them?	Guidelines for the Southern Bent Wing bat species would be beneficial.
21	Is there anything relating to bat species that is missing from the proposed content that you think should be included or addressed in the Bat Guidelines or future guidance?	Future guidelines should have an emphasis on using a combination of strategies to minimise residual risk including clear guidance on the classification of habitat features. The guidelines would ideally rank habitat features in order of criticality to inform the implementation of the avoidance and mitigation hierarchy e.g. high risk categories (remnant woodlands, wetlands, waterways and forestry plantations), medium (clustered planted tree rows), and low (planted tree rows and scattered trees).
22	Are there specific matters or parameters you think should be included in guidance regarding considerations for mitigation or compensation options?	While it is likely that some degree of curtailment may be adopted as a risk minimisation measure, due consideration should be afforded to curtailment parameters and the corresponding impact on energy production. AGL urges DEECA to adopt a balanced approach that considers the commercial impact of higher cut-in wind speeds and the consequences of curtailment on wind energy projects not only from the lens of conservation but also the societal need to manage climate change for the benefit of ecology and Australia's energy security. It is essential that future curtailment parameter guidelines be developed in collaboration with industry and be strategically applied in combination with other mitigation and avoidance measures.
23	Are there specific matters or parameters you think should be included in guidance regarding considerations for buffering during siting decisions?	Buffering should be considered in the context of data driven ranking assigned to habitat features, as opposed to the adoption of blanket buffers around all vegetation (refer to our response to question 21 above for further detail).