I **object** to the Bowmans Creek Wind Project. There are too many questions that have not been adequately answered or not answered at all by the DPE and Ark Energy. This part of NSW has already suffered enough from the **cumulative effects** of power generation, mining, quarrying and land clearing.

The Independent Planning Commission cannot, in good conscience, approve this project. If the project is approved then the following must be a condition of consent:

- Remove turbines 59, 66, 67, 69 and 70
- Acquisition of all non-associated properties within 4.5km of the nearest turbine. In particular, Lot 40 Muscle Creek Road (DE-1) and E17-3.

Visual

My property at will be impacted just as much, if not **more** than property G17-1 which is tucked under the hill.

Please consider the following table as prepared by the DPE:

Table 7 | Visual impact assessment: non-associated residences below the black line

Receiver	Turbines and	No. of turbines	,	Complies with visual performance objective (Yes / No)				Recommended
		between black & blue line (3 – 4.4 km)		Ark assessment	Department and OHD assessment 1			Mitigation
	the black line (<3 km)			All objectives	Visual	Multiple wind turbine	Landscape scenic	
=					Magnitude		integrity	

Muscle Creek Cluster											
G17-1	T64 (2.04), T68 (2.11), T69 (2.16), T70 (2.20), T67 (2.25), T66 (2.39), T59 (2.52)	7 (T58, T63, T42, T41, T49, T32, T48)	VIZ2	Yes	Yes	Yes	No, turbines dominate the landscape	Delete turbines T64 and T68 Vegetation screening			
DE-1 ²	T68 (2.58), T51 (2.66), T57 (2.73), T36 (2.87), T52 (2.95)	13 (T58, T63, T42, T43, T46, T47, T35, T45, T37, T40, T39, T38, T34)	VIZ2	Yes	Yes	Yes	Yes, dwelling could be oriented with primary views away from project	Vegetation screening			

To summarize:

- DE-1 has 5 turbines within <3km vs 7 turbines for G17-1
- DE-1 has 13 turbines within 3-4.4km vs 7 turbines for G17-1
- DE-1 overall has a total of 18 turbines vs 14 turbines for G17-1
- DE-1 photo montage shows 29 turbines. A gap of 11 turbines.

In the assessment report the DPE, when referring to G17-1, states that "the Department considers that the impacts on this residence would not be significant if Ark were to secure a neighbour agreement associated with turbines T64 and T68, or acquire the property."

Consent must include a condition for the acquisition of Lot 40 Muscle Creek Road (DE-1). This property is impacted to the same or greater degree as G17-1.

The assessment report of November 2023 prepared by the DPE includes section 6.2.3 Impact Assessment. I note the following issues:

- 1. The DPE states "There are 49 non-associated receivers located within 4.4 km of the nearest proposed turbine, all of which are VIZ2 receivers (see Figure 5)." This is incorrect and the number of receivers has been understated. There are two non-associated receivers missing from this statement. These include the property at 820 Muscle Creek Road and the property at 1023 Muscle Creek Road. Both of these properties have residences and are inhabited. These are neighbouring properties that we know of in Muscle Creek. How many others are there that have been omitted?
- 2. The visual impact assessment for Lot 40 Muscle Creek Road or DE-1 indicates that mitigation can be achieved with visual screening and that "dwelling could be oriented with primary views away from project". I find it unacceptable that the DPE can tell me how and where to build my house. Visual screening is also **not** a valid option for the following reasons:
 - The views are why I purchased the property. They are priceless.
 - The turbines will project nearly a kilometre into the sky. Trees will never grow to a height that will screen the turbines from view.
 - I will be long dead before the trees have achieved any significant height.
 - Planting and maintaining healthy trees will require substantial amounts of water. It is not readily available and the cost would be prohibitive. Is the DPE suggesting, and is Ark Energy offering to supply water for the life of the project?
 - Bush fire is a risk. Vegetative screening does not align with this. We have one road in and one road out. There has already been a fire in Muscle Creek in December 2023. There was a fire at Mt Owen in November this year. There was a very significant fire in Scone in October 2023 that was only contained by aerial methods. There was the Sir Ivan fire in early 2017 affecting Cassilis, Coolah and Dunedoo. It is only a matter of time before this area experiences a bushfire.
 - The potential for loss of life and property is unacceptable and the so called "benefits" of the project do not and should not outweigh this risk.

Neighbour agreements have been signed with F17-1 and F19-1. How does that solve the visual, noise, property value and other issues at Lot 40 Muscle Creek Road (DE-1)? It does not in any way solve anything.

At the public meeting Professor Clark asked Iwan Davies the following: *Thank you. And I'm just looking to the back, do we have time for one more question?*Thank you. I'm interested in the approach of screening using vegetation and

the consideration that's been raised by a number of sites that we visited was around bushfires where there's a conflict between how close this vegetation can be, I guess, grown to the residences but the introduction of an additional hazard. Can you make some comment on whether or not that was considered?

Mr Davies: Thank you. That is a matter that the Department considers. Now, ultimately this is based on - that recommendation is based on, I suppose, additional screening that the Department does not consider is warranted to reduce the visual 40 impacts of the project, it's simply optional to landowners. However, there are one or two residences that the Department considers that screening is requires and that includes G17-1. That would need to be a matter - a post-approval matter to be discussed between the Applicant and the residents and any - any dispute or discussion there can be - can be referred to the Department for resolution.

The comments from Mr Davies don't match the commentary in the Consent recommendations, the assessment report or the OHD report provided to the IPC. The DPE is glossing over issues and rushing this project through. There is a very blurred line between the DPE and Ark Energy and the DPE is not maintaining a professional, unbiased distance from this project. They are **not** protecting the public (i.e. impacted residents) interest.

Fire fighting now relies on aerial methods for containment so where does that leave properties that are impacted by turbines? They cannot be defended. Insurance will be unavailable or unaffordable. Is Ark Energy going to reimburse all residents for the increased cost of insurance? If insurance is unavailable is Ark Energy proposing to compensate residents for any losses? I also have an issue with the local fire captain being a major host and associated receiver. In the event of a fire that results in losses who is to say that bias won't play a role in the actions of the fire department and associated vs non-associated properties experiencing losses?

Please also consider the findings of The Land and Environment Court Planning Principles on View sharing **Tenacity Consulting v Warringah [2004] NSWLEC 140.**

The Land and Environment Court says the first step which finds and includes that: Whole views are valued more highly than partial views i.e. a water view in which the interface between land and water is visible is more valuable than one in which it is obscured.

The second step which finds and includes that: Must consider from what part of the property the views are obtained.

The third step which finds and includes that: the third step is to assess the extent of the impact. This should be done for the **whole of the property**, not just for the view that is

affected. Including it is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe, or devastating.

Regarding the second and third step the VAB does not cover or take into consideration from what part of a property the views are obtained from or assessing the extent of the impact for the whole property.

The fourth step which finds and includes that: to assess the reasonableness of the proposal that is causing the impact. A development that complies with all planning controls would be considered more reasonable than one that breaches them. Where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered **unreasonable**. With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable.

The fourth step has shown that the development does not comply with one or more planning controls. The findings of the Land and Environment Court cannot be overruled by the clauses and content of the VAB. Despite this the Department have not ensured that the project complies with the findings of the court.

Photo Montages

Based on the (inaccurate) photo montages done from DE-1 I will see at least 29 turbines from my property. This is **understated** and the DPE pointed out in their site visit that there was a cluster of turbines omitted from my photo montages.

Please note that I requested that these photo montages be provided by the developer. I had to repeatedly follow up with them to obtain these. If I had not requested the montages they would not have been done. Please note that any contact I have had with the developer has been initiated by me.

In my photos the turbines appear at a similar scale within the landscape despite the distance from the viewer to the turbines being approximately double. This comparison demonstrates that by increasing the horizontal field of view, the scale and impact of the turbines is visually diminished. As such they should not be used for assessing the scale and magnitude of the impacts as the impact of the turbines is visually diminished. The photomontages are non-compliant with the requirements of the VAB and they should not be used for assessing the scale and magnitude of the impacts as the impact of the turbines is visually diminished.

Night photos have never been provided by Ark Energy. The requirements that the turbines be illuminated has been ignored by all parties except by those who will be impacted. The

CASA guidelines indicate each turbine will require a minimum of two lighting units per nacelle and one unit in the midway point of the tower. Ark Energy has covered up this requirement from the neighbours and communities affected by this project. If I wanted to live in the middle of a city that is where I would have bought. I don't want the noise and the lights and the clamour that goes with an urban environment. Similarly, I don't want this to be thrust upon me. It is unfair and unjust.

Noise

The noise modelling in the EIS was conducted by Sonus on wind turbine model — Vesta V162- 5.6 with serrated trailing edge blades and a hub height of 140m. This model was chosen because it is a representative example of the type of generation and size of the wind turbine generator proposed for the project. This model has a capacity of up to 5.6MW per turbine. Ark Energy have notified the DPE that the hub height will now be 150m and with a capacity of up to 6.2 MW per turbine. Ark Energy have never provided an amended report advising of the change to the project regarding the hub height or the increase in capacity for each turbine from 5.6MW to 6.2MW.

The increase in hub height compared to the modelling is a 7% increase and the capacity is a 12% increase. No additional assessment has been conducted on these changes. The DPE have not asked for an additional assessment report as required. As a result, the project does not comply with the requirements of the Environmental Planning and Assessment Act 1979 nor the requirements of the Environmental Planning and Assessment Regulation 2000.

There are no controls and minimal monitoring. This is an issue because the noise modelling was only conducted up to a maximum wind speed of 9m/s however the cut-out wind speed for the wind turbines as advised by Vesta is 25m/s. Vesta advises that their 6.2MW models have a maximum sound power of 104.8dB(A), this is 0.8dB(A) above the maximum sound power level reported in the modelling presented by Sonus. Note a 1dB change in sound equates to about a 26% increase in sound energy. The serrated trailing edge blades wear and fail quickly, this will increase the noise generated by the wind turbines. Ark Energy have indicated they will only use predictive noise modelling to review the impacts of wind turbine noise on the community. The DPE has not challenged this approach.

This is not industry leading practice; industry leading practice is to install strategically placed real time noise monitors and evaluate the noise levels 24/7. Without a real-time continuous noise monitoring systems wind farm operations cannot be modified in response to changing meteorological conditions particularly noise enhancing conditions for example temperature inversions. The NSW EPA have the expectation that noise is being managed under all meteorological conditions. This is not possible without a real-time noise monitoring network.

To ensure compliance the consent conditions must include continuous noise monitoring stations to be placed at strategic locations. A review into the effectiveness of the noise monitoring locations should be conducted every six months after consultation with non-associated home and landowners. This requirement would then allow the project to react to and modify operations to ensure compliance including shutting down the operations if needed. This condition is now seen as standard for new projects that are approved regardless of the industry.

My property is going to be impacted by the noise of 18 turbines (see above table) and 29 according to the photo montage. Noise is magnified in my valley and travels significant distances. This has not been addressed or mitigated in any way.

Consultation

Ark Energy have not consulted with the community or properly addressed concerns. This is a rural area and some members of the community have struggled to source information and communication from Ark Energy and the DPE. Consultation has not been inclusive or accessible.

Meetings were held via Zoom. They were not advertised in a timely manner and they were not held at times when people could easily attend without taking time off work. Not everyone is able to use a computer and login to a Zoom meeting. Attendance at these meetings was very low.

Ark Energy hid behind Covid and used that as an excuse to not hold public meetings and to exclude the community from information and updates.

Community Consultation Committee (CCC) – The last CCC meeting was held in October 2021, two years and two months ago.

The DPE, contrary to the requirements of the Wind Energy Guidelines December 2016 Clause 5.3, disbanded the CCC on 7th April 2022.

The CCC was supposed to work within the Community Consultative Committee Guideline for State Significant Projects January 2019. However, Ark Energy did not work within the guidelines, including publishing the CCC minutes on their web site within four weeks of the meeting. The DPE was made aware of the shortfalls, but no actions were taken. Of note a CCC meeting held on April 14, 2021, to consult about the recently released EIS, the minutes for this meeting were not published on the Ark Energy web site until October 27, 2021, 196 days (28 weeks) after the meeting.

There has been no formal community consultation in any format for over 2 years.

Ark Energy uses hosts/associated receivers to spread misinformation in the community. There have been repeated instances of non-associated receivers being told that a neighbouring property had signed a neighbourhood agreement with Ark Energy. In every case they had not done so. I query whether some of the neighbourhood agreements signed were done under the impression that if they did not sign they "would miss out."

Clause A8

I am deeply concerned with Clause A8 of the recommended consent conditions:

UPGRADING OF WIND TURBINES AND ANCILLARY INFRASTRUCTURE A8

The Applicant may upgrade the wind turbines and ancillary infrastructure on site provided these upgrades remain within the approved development disturbance area. Prior to carrying out any such upgrades, the Applicant must provide revised layout plans and project details of the development to the Planning Secretary incorporating the proposed upgrades.

This is too open ended and must be changed.

The EIS contains specific reference to the Wind Turbine Pad dimensions being 70m \times 30m (Figure 12 conceptual Wind Turbine components).

The information Ms Riggs provided to the Department on October 28, 2022 does not match. Ms Riggs informed the DPE that the wind turbine pads would now be $70m \times 220m$ each and the access roads would be 7m - 100m wide.

I assume this is to allow for the installation of far bigger turbines than originally stated in the EIS. If so, that changes everything in terms of noise, visuals, impacts, costs to build and dismantle, council revenue. The whole lot.

This is another example of the DPE and Ark Energy lying to the IPC and the community regarding A8 and the recommended consent conditions.

Wildlife

The EIS identified flora species requiring further assessment, koalas were assessed in this section of the EIS. The EIS justified not retaining the koala in the ecological survey for the following reason "Microhabitats within the subject land are degraded, such that the species is unlikely to utilise the habitat. Subject land occurs in highly cleared agricultural landscape with limited occurrence of preferred food trees. The answer to this should be to work to manage and improve the environment so that it can sustain koalas again. It is not an excuse to further damage the land.

One proponent (host) had recently stated in an article in our local newspaper that he had koalas on his property and remnant old growth rainforest. At McCullys Gap one non-associated landholder found koala signs on their property after a survey was completed for development purposes.

The Hunter Wildlife Corridor extends from the base of the valley to the Barrington Tops and this project will cover a large portion of this land. This will disrupt the continuity of the corridor. Wildlife is struggling in Australia and this project does nothing to alleviate this problem.

Other

Please see below some inaccuracies with the "Site Inspection and Locality Tour Notes" as uploaded to the website.

The "Record of Site Inspection and Locality Tour" on page 13 references Stop 3. There is a photo with the following caption "View from property towards west, with 1785 Muscle Creek Road on other side of ridgline". I note that there is no such address as 1785 Muscle Creek Road. The last address and residence on Muscle Creek Road is 1142 Muscle Creek Road.

In order to view the project from Receiver G17-1 you travelled through **two** other non-associated properties. It is stated that the Commission "viewed the project site from a stop adjacent to the front gate of Receiver G17-1 and looked towards the indicative locations of the south-west turbine cluster. The Commission also looked towards the neighbouring property at 819 Muscle Creek Road, Muscle Creek while at this stop and viewed the property en route to Stop 3." The front gate described is in fact a gate that belongs to E17-5 **not** G17-1. Once the Commission crossed the property belonging to E17-5 they passed through another front gate and this gate belongs to Lot 40 Muscle Creek Road. The front gate to G17-1 is a further 2.8km and two non-associated properties away from E17-5 and the photos taken at Stop 3.

The impact of turbines 64, 68, 67 and 66 at Stop 3 and G17-1 are far greater than just one property. I argue that turbines 70 and 59 must also be considered for these locations. These included E17-5 and Lot 40 Muscle Creek Road. The latter property has not been acknowledged by Ark Energy as being severely impacted. The impact will be just as much, if not more, than G17-1. Any agreement reached with G17-1 needs to be at least matched for Lot 40 Muscle Creek Road.

I also note that 820 Muscle Creek Road has been completely disregarded by Ark Energy and the DPE. The residence can be clearly viewed from any map and it is located next to 819 Muscle Creek Road (E17-3) and across from E17-5.

Summary

There are many very real issues associated with this project and all of them have been covered across all the various submissions. The project is causing genuine despair and has left many people at breaking point. We all work, pay taxes and dream and for Ark Energy, the DPE and others to treat our concerns with such contempt and by suggesting that a tree will make the impact of the sight and sound of turbines acceptable or that we orient our lives to face away from the turbines is ridiculous. Every person and every home matters please consider that in your assessment.

This development is an opportunity for the IPC to improve all aspects of the wind industry. It is an industry fraught with loose guidelines, no oversight or enforcement and amoral and unscrupulous developers who prey on rural communities.

I challenge the IPC to have the courage to **not approve** the Bowmans Creek Wind Project. This would send a decisive message to wind developers to clean up their acts. The commission has been given many valid and truthful examples that support this project being denied and I ask that you act in support of these people and their communities.