Burrendong Wind Farm EIS

Application No. SSD-8950984

Public Exhibition 16/11/23 - 20/12/23

Submission of Objection

Burrendong Save Our Surroundings

Contents

Burrendong Save Our Surroundings (SOS) – About Us

Burrendong SOS is a grass-roots community group that currently comprises of 70 non-associated landowners and residents surrounding the Burrendong Wind Farm project site.

In April 2022, Burrendong SOS emerged in response to a critical situation. Many landowners and residents directly affected by the Burrendong Wind Farm project were left in the dark, receiving no notification of the project from the Proponent. Our community's voice and interests needed to be represented and heard, and that's when Burrendong SOS came together to fill this crucial communication gap.

At the heart of Burrendong SOS is the spirit of collaboration. Our members actively share information, insights, and experiences, pooling our collective knowledge and resources to empower and support one another. By joining forces, we aim to achieve the best outcomes for our community and the local environment that we love, ensuring that the concerns and aspirations of every resident are taken into account and that we are fairly represented when it comes the push for renewable energy that is apparently set to engulf us.

Burrendong SOS Representatives request an onsite meeting with the NSW Department of Planning and Environment when they visit the area for site inspections for the project.

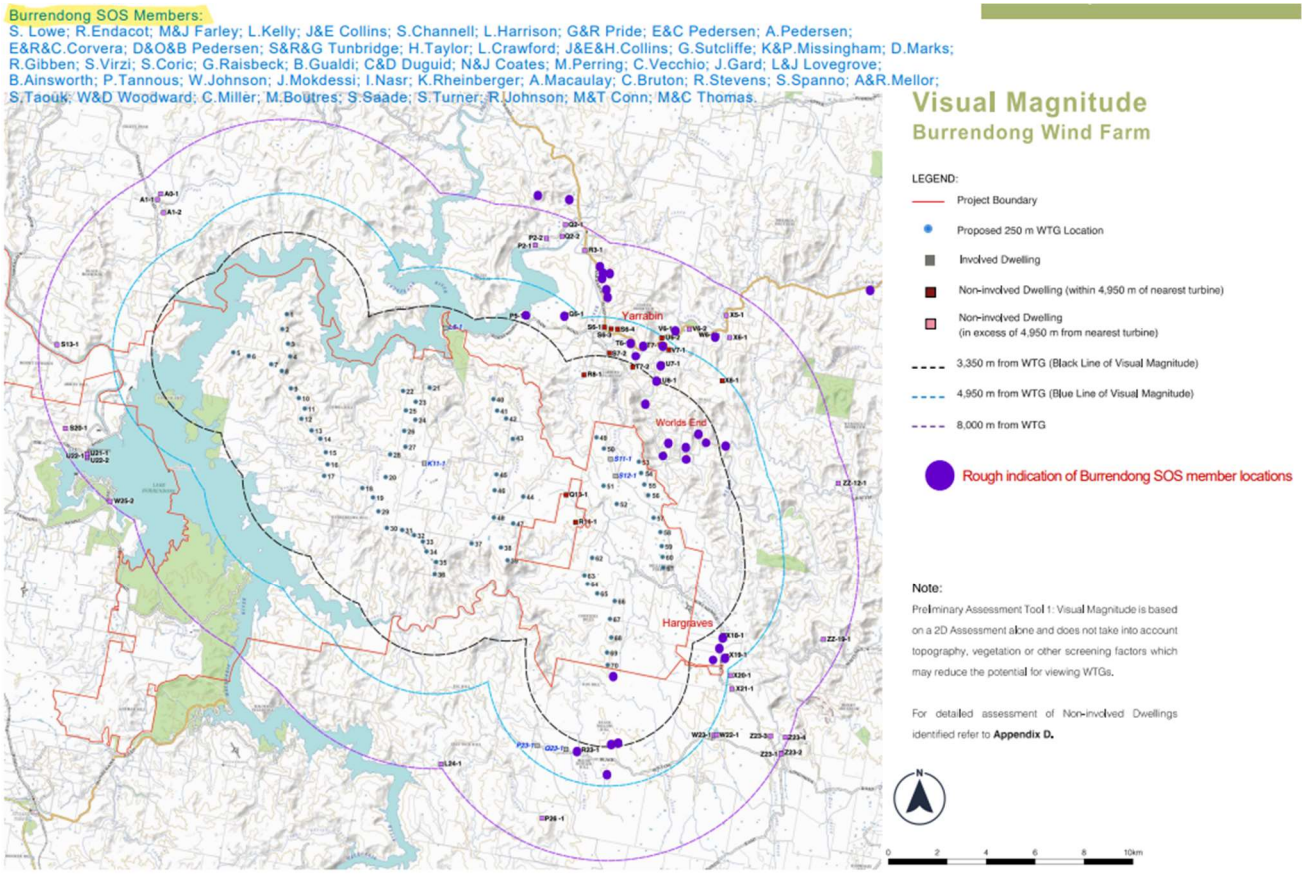


Figure 1: *Burrendong SOS Members Map*

Figure 2: *Burrendong SOS Representatives speaking at the Reckless Renewables Rally, Sydney Martin Place, 30 November 2023.*

Nature and Purpose of this Submission Document

This document is a submission by way of objection to SSD 8950984 (the State Significant Development Application) relating to the proposed Burrendong Windfarm (located on the subject site).

We are instructed that The Minister for Planning and Public Spaces or the Independent Planning Commission (IPC) are the alternate Consent Authorities.

The site is located in part in the Dubbo Regional Council area and in part in the Mid-Western Regional Council area. Burrendong SOS members are located within the Mid-Western Regional Council area.

Having considered the proposal and its surrounds and the details of the SSD application currently before DPE, we are of the opinion that the proposal, in its present form, does not warrant support. In addition, we are of the view that significant amendments would need to be made to the development proposal before DPE was in a position to determine the development application by way of approval.

This submission details the various ways the proposed development lacks finesse and reasonable consideration for the amenity of surrounding properties and, in particular, Burrendong SOS member properties. The latter would, in our opinion, be greatly impacted—and adversely so—by the proposed development if it were to be carried out in its present form.

The objection contained in this submission is based on various grounds detailed in the following sections. Please note this is not an exhaustive analysis and we reserve our right to add to the overall submission following the 20 December 2023 deadline, as per the direction from DPE to Burrendong SOS members.

For the record, Burrendong SOS assert that the limited 28 day submission (plus one week extension) timeframe provided to review the high volume of information contained within the EIS and cross-checking compliance with associated legislation, guidelines and policies, released in the lead up to Christmas and during harvest season is not an equitable nor reasonable exhibition timeframe. An extended 90 day exhibition/submission period is required.

Burrendong SOS notes this submission of objection is a long one, however it is not as long as the Burrendong Wind Farm EIS and its associated attachments. We request that each individual issue raised by our community in this submission is given the due respect of a detailed and considered response.

Written content under headings in this submission highlighted YELLOW are not finalised and may be the subject of a later submission after Christmas, however if a later submission is not receive points made in YELLOW must still be addressed. Headings highlighted GREEN in this submission are more-or-less finalised.

The Development Proposal

The development application proposes the following, as described at s1.2 [at P3], of an EIS by Ecological Australia Pty Limited on behalf of Burrendong Wind Farm Pty Limited, (a subsidiary of Ark Energy Corporation Pty Limited which in turn is a subsidiary of Korea Zinc Company Limited), dated 7 November 2023:

> *The Project consists of the installation, operation, maintenance, and decommissioning of up to seventy (70) Wind Turbine Generators (WTGs), electrical infrastructure, ancillary infrastructure, public road upgrades and access tracks and temporary facilities. The Project is designed to accommodate WTGs up to 250 m in height, with a nameplate capacity (or maximum effect) of approximately 6-7 MW or greater. On these terms, and subject to Development Consent and market changes, the Project is estimated to have an installed generating capacity of approximately 400-500 MW. The Project would connect to the existing TransGrid 330 kV transmission line to the west of the Project Site, on the western side of Lake Burrendong.*

Relevant Legislation, Guidelines, Policies

In preparing this submission we attempted to have regard to the following legislation, regulations and other statutory instruments and documents to the extent permitted given the limitations of the public exhibition period:

- Environmental Planning and Assessment Act 1979 (EPAA);
- Environmental Planning and Assessment Regulation 2020 (EPAR);
- Planning Secretary's Environmental Assessment Requirements (SEARS) for SSD-8950984 dated 30/09/22, pursuant to Section 4.12(8) of EPAA and Part 8 of EPAR;
- NSW Local Government Act 1993;
- NSW Local Government Act (Manufactured Home Estates, Caravan Parks Camping Grounds, and Moveable Dwellings) Regulation 2021 (LG Regs);
- Biodiversity Conservation Act 2016;
- Fisheries Management Act 1994;
- State Environmental Planning Policy (Planning Systems) 2021;
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Code SEPP);
- NSW Wind Energy Guidelines 2016 (WEG);
- NSW Wind Energy: Visual Assessment Bulletin 2016 (the Bulletin);
- Undertaking Engagement Guidelines for State Significant Projects 2022 (UEGSSP);
- Cumulative Impact Assessment Guidelines for State Significant Projects 2022 (CIAGSSP);
- Social Impact Assessment Guideline for State Significant Projects 2023 (SIAGSSP);
- Technical Supplement: Social Impact Assessment Guideline for State Significant Projects 2003 (TS.SIAGSSP);

- Central West and Orana Regional Plan 2041 (CWORP);
- Mid-Western Local Strategic Planning Statement (MWLSPS);
- Mid-Western Regional Local Environmental Plan 2012 (MWRLEP);
- Mid-Western Regional Development Control Plan 2013 (MWRDCP);
- Dubbo Local Strategic Planning Statement (DLSPS);
- Dubbo Regional Local Environmental Plan 2022 (DRLEP);
- Dubbo Regional Development Control Plan 2013 (DRDCP).

Definition of a Dwelling- Failure

We refer you to the findings of Pierre Le Bas, Director and Legal Counsel of Turnbull Planning International Pty Ltd's with regard to their submission to this Burrendong Wind Farm SSD Application No. SSD-8950984, prepared on behalf of Burrendong SOS Members.

In this regard, it is clear that the Ark Energy has adopted the definition of a dwelling via the EIS that is inconsistent with any statutory definition and is impermissible as a matter of law.

This has the effect of excluding from consideration in the assessment of the application, impacts created (visual, noise and otherwise) in relation to dwellings that are purported to be unauthorised or otherwise unlawful.

The definition contained in the Standard Instrument provides that:

> ***dwelling*** means a room or suite of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate domicile.

In excluding dwellings that may or may not be unlawful from impact assessment in the EIS, Ark Energy and DPE would be making a gross jurisdictional error as, whether such dwellings are unlawful is irrelevant to the required assessment tasks. Any unlawful work is a matter for another day in another jurisdiction. It is beyond power of Ark Energy or DPE to unilaterally determine as to whether a particular dwelling is unlawful in any case. This is a matter for a Court in another jurisdiction.

Ark Energy's interpretation of a dwelling as used in the EIS contradicts the assessment requirements of the EP&A Act, the SEARS and the WEG as outlined by the Turnbull International Pty Ltd submission. It has resulted in Ark Energy's unlawful exclusion of approximately 38 (or more) non-involved dwellings located within 4,950m of proposed turbine/s (with approximately 21 of these located within 3,350m of proposed turbine/s) from the Burrendong Wind Farm EIS impact assessments. Dwellings not referred to include for example 100+ year old operational farmhouses.

Please refer to the below map that indicates the general location of these missing non-involved dwellings (orange dots), determined by Burrendong SOS Representatives based on high-level aerial analysis, limited field research and community consultation.

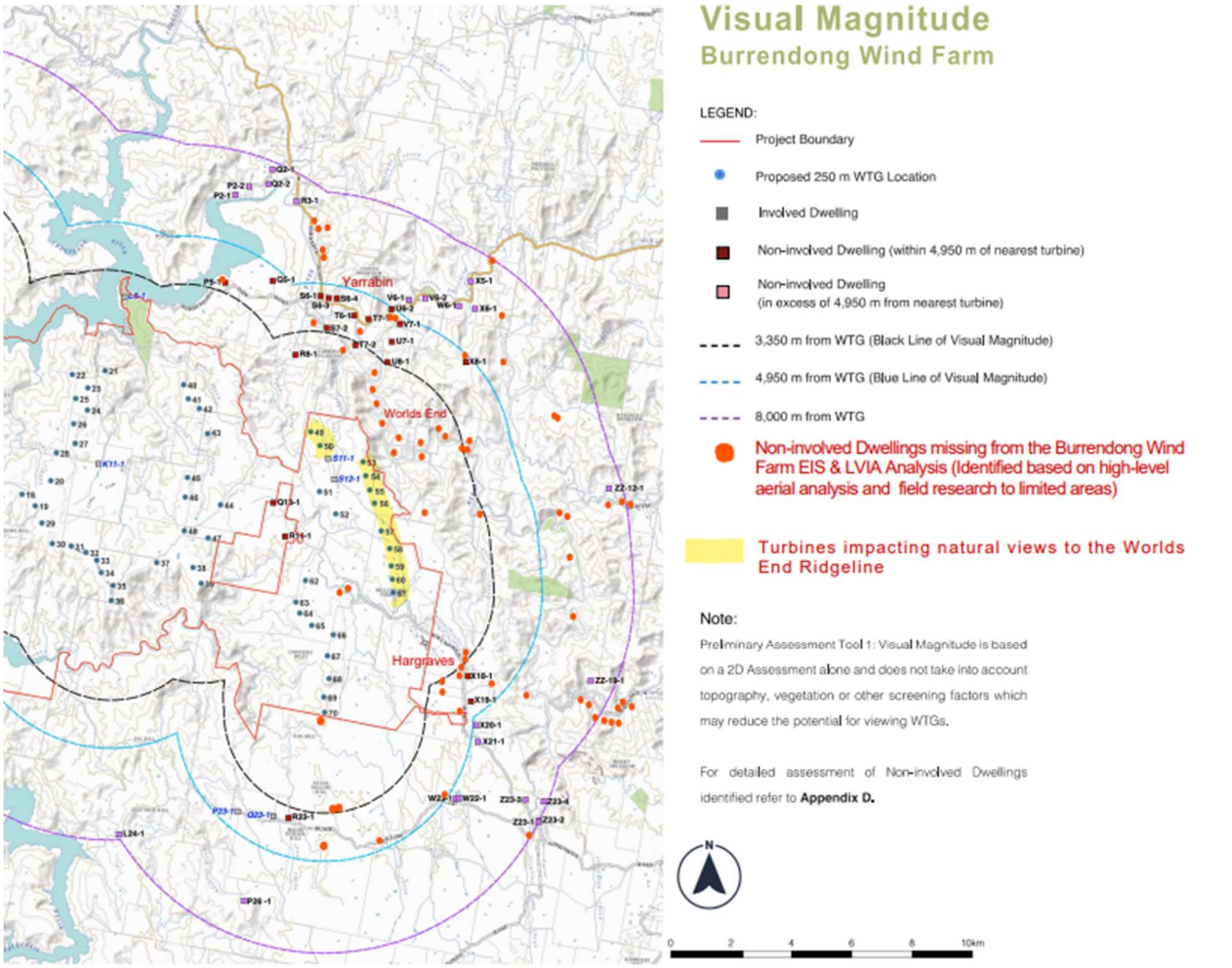


Figure 3: *Burrendong Wind Farm LVIA P38 Map. Yellow markup identifies the Worlds End Ridgeline. Orange dots identify non-associated dwellings missing from impact assessments.*

Definition of a Dwelling is not Supported by LEC Judgement on that which Constitutes a Dwelling

A 'Moveable Dwelling' can contain 'the essential components of a domicile for the exclusive use of the occupant, being: sleeping, bathroom and cooking facilities" and as such require dwelling impact assessments via the EIS. In this regard, the EIS currently fails to identify and assess impacts on all dwellings as required by the EPAA, SEARS and WEG.

This position is supported in Platform Architects Pty Ltd V Northern Beaches Council (2020) NSWLEC 185. Notably:

40. The definitions of these terms in the WLEP provide: ……

Dwelling *means a room or a suite of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate domicile.*

41. ……..

42. ……. The concept of a dwelling has been the subject of considerable debate over many years. As a general proposition a dwelling must contain the essential components of a domicile for the exclusive use of the occupant, being: sleeping; bathroom and cooking facilities. Each development

will be required to be considered on its own facts to determine whether it meets such requirements…….

Energy Yields and Co2 Savings – False and misleading

We contend that the estimated installed generating capacity for the Burrendong Wind Farm proposal is in fact misleading and a gross over estimation.

This project is likely to have an installed running capacity of only 30% or less than that stated in the EIS, based on the less than optimal wind resources available in the area (which is not mapped with the proposed turbine overlay as required) and considering the fact that for example, the Mt Emerald Wind Farm (West of Cairns , QLD) has post construction operating data indicating that it only runs at a median 18.1% generating capacity factor, that is only when the wind blows (information provided by Rainforest Reserves Australia https://www.rainforestreserves.org.au/).

The EIS should be amended, along with properly documented Co2 savings. These are also likely to be 30% or less than that which is stated (information provided by Rainforest Reserves Australia: https://www.rainforestreserves.org.au/).

Additionally, the estimate of the average number of trees per hectare across Australian forests and woodlands (156 trees/hectare, including both large and small trees) - WWF Australia. This project has the potential on these figures to remove some 133,380 trees both large and small. Has the loss of Co2 absorption from the removal of this vegetation been deducted from the projects overall Co2 savings calculations? Please provide revised figures accordingly.

Non-compliance with Zone Objectives under Local EPI's

250m high industrial turbines (that spin with lights and potential nuisance noise) are proposed to tower above ridgelines and significantly alter natural views and outlooks for surrounding landowners, residents and visitors to the area. These turbines will involve associated infrastructure and vegetation clearing for access roads, turbine pads, site facilities and transmission infrastructure etc, that will further modify the existing special ecological, scientific, cultural and aesthetic values of the area.

The proposal will dramatically alter the areas ecosystem, ecological, scientific, cultural and aesthetic values. For example:

- Disturbing the habitat and threatening the continued existence of the local Wedge Tail Eagle population (the Apex predator for the area), which is also the local Wiradjuri peoples culturally significant Totem Animal along with the Crow.
- High kill rate of bats, including micro bats (key pollinators for the area) where their internal organs explode due to changes in barometric pressure generated by the turbines.
- High likelihood of Koalas and Sugar Gliders etc losing their home due to habitat destruction from turbine noise, night lighting and vegetation clearing, noting Burrendong is an Aboriginal word for Koala (as stated in the NSW Water information brochure on Burrendong Dam) and the project site is home to a significant Koala population.
- BPA nanoparticle contamination of soil and waterways flowing into Burrendong Dam from erosion of epoxy resin on turbine blades that contain BPA.

Turbines and associate infrastructure works are predominantly proposed on land zoned C3 Environmental Management on the project site.

We submit that the proposal is inconsistent the MWRLEP C3 Environmental Management Zone objectives:

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To manage development within the water supply catchment lands of Windamere and Burrendong Dams, to conserve and enhance the district's water resources.*

We submit that this proposal is also inconsistent with the following objectives of the DRLEP C3 Environmental Management Zone:

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To recognise the environmental significance of certain areas.*
- *To minimise the adverse effect of development on the salinity levels of certain land.*

To a lesser extent, turbines are proposed on RU4 land that is predominantly surrounded by C3 Environmental Management Zoned Land. We submit that the proposal is inconsistent with the following objective of the RU4 Primary Production Small Lots zone of MWRLEP:

• *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

Landscape Visual Impact Assessment – Failure

This section outlines a myriad of assessment failures identified via a high-level review of the LVIA.

Burrendong SOS requests that DPE commission an independent Burrendong Wind Farm LVIA, considering the multiple (but not exhaustive) irreconcilable failures of MoirLA's LVIA outlined in this section.

Burrendong SOS notes that an independent LVIA assessment was afforded the Bowmans Creek Wind Farm and we request a similar level of independent assessment.

Identification of all Non-Associated Dwellings for Assessment of Visual Impacts - Failure

Over 30 dwellings within 4,950m are missing from the visual impact assessment. Refer to the above section 'Definition of a Dwelling-Failure' and associated map above.

Properties with Dwelling Entitlements Identification – Failure

The SEARs issued for the project requires the EIS and associated LVIA to include detailed consideration of potential visual impacts on local residences, including properties with dwelling entitlements.

We submit that the LVIA fails to identify a significant number of properties with dwelling entitlements within 5km of the subject site. This failure has precluded a fair detailed assessment of impacts and identification of mitigation measures to reduce or eliminate visual impacts (e.g. via appropriate siting and design of turbines to mitigate cumulative impacts).

P62 of the LVIA states:

> *the expression 'dwelling entitlement' has been interpreted as the potential for a landowner to obtain development approval for a dwelling consistent with the applicable environmental planning instrument.*

Please be advised that the following legislation permits 'dwelling entitlements' for properties surrounding the subject site:

- The Codes SEPP, Part 2; Division 1; Subdivision 16E – Farm Stay Accommodation, permits up to six (6) dwellings (dwelling entitlements) as exempt development on properties zoned RU1 Primary Production that are 15ha and over. In this regard numerous properties are missing from the LVIA Appendix F dwelling entitlements map and associated assessment.
- The Local Government Act (Manufactured Home Estates, Caravan Parks, Camping Grounds, and Moveable Dwellings) Regulation 2021 (LG Regs) provides dwelling entitlements of up to 2 moveable dwellings on a property as exempt development. In this regard numerous properties are missing from the LVIA dwelling entitlements map and associated assessment.
- The MWRLEP permits dwellings on properties 100ha and over on land zoned RU1 Primary Production. In this regard several 100ha and over properties are missing from the LVIA dwelling entitlements map and associated impact assessment (including but not limited to Properties No 237 Worlds End Road, Worlds End; No 445 Merrendee Road, Yarrabin and No.889 Wallawaugh Road, Hargraves
- The failure to identify a large number of properties with dwelling entitlements in the LVIA (LVIA's Attachment F) has resulted in a flawed visual impact assessment, notably for Burrendong SOS members properties that are predominantly located to the east and north-east of the Worlds End Ridgeline within Landscape Character Unit (LCU) 07: Worlds End and LCU 02: Yarrabin / Hargraves Farmlands (LVIA P40 LCU map).

Burrendong SOS members properties, with dwelling entitlements and dwellings as close as 1.2km to 2km from proposed 250m high turbines, have been incorrectly excluded from a detailed impact assessment.

Turbines, proposed to be situated on elevated land will significantly impact the skyline, towering above the Worlds End Ridgeline and reaching over 1/2km into the air to their tip above the ground level of Burrendong SOS members properties situated in the north-eastern valley below.

Consideration of the LVIA 'Zone of Visual Influence' map (LVIA Appendix F, Figure F.2) indicates that a significant number of non-involved properties with dwelling entitlements and dwellings within the LCU07 'Worlds End Valley' will be able to view 1-12 turbines. This lower number of visible turbines is reflective of the fact that the Worlds End Ridgeline acts as an effective high scenic quality visual landscape barrier, blocking south-western views from non-involved properties to the majority of turbines proposed on the project site. In this regard, the LVIA assessment fails to consider a key visual impact mitigation option which is to delete turbine Nos 49, 50 and 53 to 61, as a viable tool to eliminate and/or significantly reduce visual impacts from the highest density of residential development concentrated to the north-east of the subject site.

P62 of the LVIA with regard to Dwelling Entitlements states:

> *The assessment concluded that there are opportunities to position a dwelling on the majority of lots while ensuring minimal visibility of the Project. As the details of the Project are publicly available, a dwelling can be sited and orientated with well-informed consideration of the potential visual impacts resulting from the Project.*

We assert the above conclusion that future dwellings be sited and orientated away from an appreciation of views to the Worlds End Ridgeline and other views of visual significance is unrealistic. We believe this is the equivalent of requiring coastal landowners to locate, design and orientate their houses away from an appreciation of ocean views! Views to the Worlds End Ridgeline for residents and landowners of Yarrabin, Worlds End and Hargraves are iconic and greatly appreciated by the local residents.

Existing dwellings in immediate proximity to the north-east of the Worlds End ridgeline for example, have been designed and orientated to appreciate the high scenic quality of the Worlds End Ridgeline, which is intrinsically linked to the enjoyment and lifestyle values for properties in the area. So is the enjoyment of properties due to their quiet isolation, natural outlooks and the dark night sky for star gazing.

Visual impact mitigation measures should involve the removal of turbine Nos.40, 41, 42, 43, 49, 50, 53, 54, 55, 56, 57, 58 from the proposal, to eliminate and or significantly reduce visual impacts and lighting from the highest density of surrounding non-involved properties with dwellings and dwelling entitlements located to the east and north-east of the project site. Based on the above considerations and the fact that there will be significant visual impacts created by this development for existing landowners and residents we feel that this ground of objection alone, dictates that the development must fail.

Notification, Community Engagement and Visual Impact Survey – Failures

It is evident from a GIPA request by a Burrendong SOS Representative submitted to Mid-Western Regional Council that the Proponent initially contacted landowners now associated with the proposal via Council issued letters to their primary postal addresses (paid for by the Proponent). This courtesy was not extended to non-associated landowners immediately surrounding the project site, to notify them at the outset of the project.

Initially, the proponent placed a notice in the local newspaper/s and may have undertaken a letter box drop in a lacklustre effort to notify some non-associated landowners surrounding the proposal. This initial notification effort was grossly inadequate, as many landowners don't receive local newspaper deliveries, lack letterboxes at their property gates, and or may not live on their own properties full time. As such, many landowners have remained unaware of the proposal for years.

May 2020 - P88 of the EIS suggests that project newsletter updates have been sent directly via post and email to project stakeholders from May 2020 to June 2023. What the proponent fails to articulate in this statement is the fact that non-associated surrounding landowners will have only receive these on-going project newsletter updates IF they received an original letterbox drop notification or happened upon and newspaper advertisement and then subsequently took steps to sign up to receive these updates. In reality, a large number of non-associated surrounding landowners were not directly notified and remained blissfully unaware of the proposal well into 2022 and 2023 due to the proponent's lacklustre initial notification efforts of non-associated landowners.

May & September 2020 - After examining the original turbine layout maps via 'Project Updates' on the proponents website (map extracts below), it is likely that non-associated landowners who were initially notified of the proposal may have decided not to sign up for email project updates, believing the turbines would be sufficiently distant from their dwellings.

Noting there was no 'current wind investigation area' identified along the far north-eastern Worlds End Ridgeline on the original notification maps, closer to the highest density of non-associated residents and landowners:

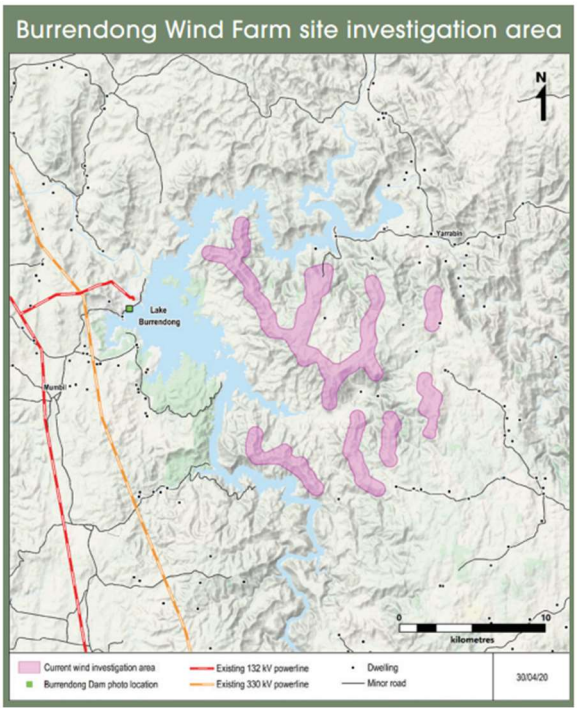


Figure 4: *Proponents May 2020 Project Newsletter – Project Layout Map – Note: No turbines are proposed along the Worlds End Ridgeline*

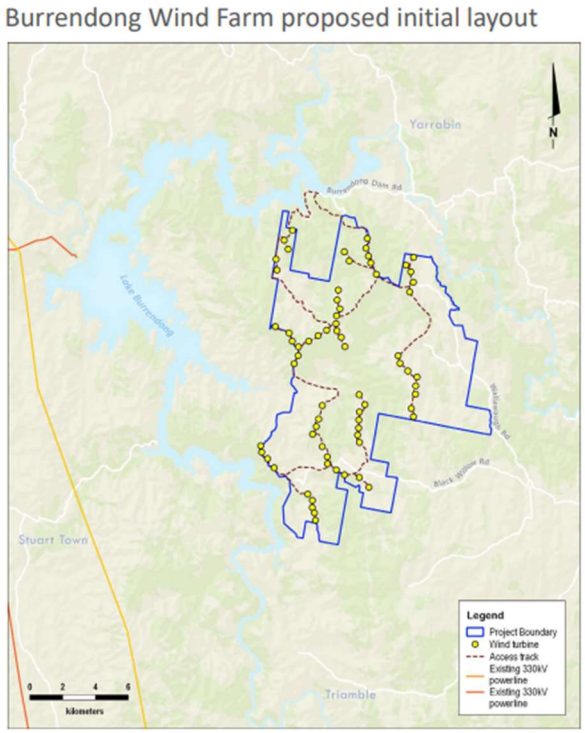


Figure 5: *Proponents September 2020 Project Newsletter – Project Layout Map – Note: No turbines are proposed along the Worlds End Ridgeline*

January 2021 - Due to inadequate project notification from the outset, the majority of non-associated landowners immediately surrounding the project were not aware of the proposal nor afforded an opportunity to contribute to MoirLA's 'Visual Impact Survey' (submission closed January 2021), that the EIS and LVIA state has informed the projects preliminary siting and design.

November 2021 - <u>10 turbines (Nos. 53 to 61) were subsequently snuck onto the project</u> layout map along the Worlds End Ridgeline and closest to the highest density of houses via a proponent's newsletter update dated November 2021 (viewable on the Proponents project website), without written articulation in the project update that these turbines had been added to the project.

As such, impacted landowners were not directly notified of these additional turbines that were proposed closer to their homes, nor were they afforded an opportunity to make comment into 'Visual Impact Survey' in this regard, to inform the preliminary siting and design of the project as required by the Bulletin. We note the abovementioned Visual Impact Survey had closed 10 months prior.

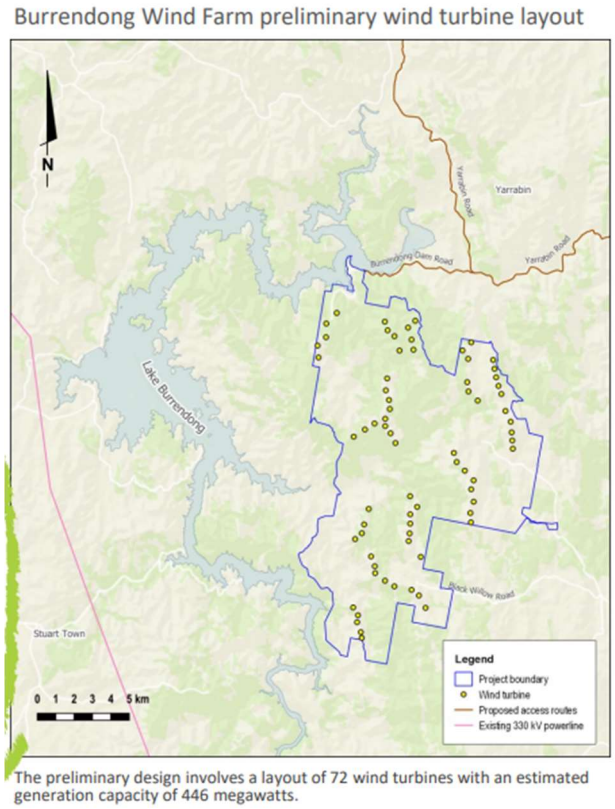


Figure 6: *Proponents November 2021 Project Newsletter – Project Layout Map – Note: 10 turbines snuck onto the far east of the project site along the Worlds End Ridgeline and closest to the highest density of residents located to the north-east of the project site.*

23 August 2022 - When Burrendong SOS members happened upon the addition of these 10 turbines, Burrendong SOS was established and a meeting was held with Ark Energy in an attempt to provide preliminary input into the projects siting and design, requesting the deletion of turbines from the proposal due to their adverse cumulative impacts on the highest density of non-associated residents and landowners located to the north-east of the site. To which Andrew Wilson, Project Manager at Ark Energy at the openly recorded meeting held on 23 August 2023 replied:

> *"we are in the business of building turbines, not deleting turbines".*

We assert that this statement is contrary to the spirit of the Bulletin and Undertaking Engagement Guidelines for State Significant Projects to engage and work with the local community to minimise impacts on them.

The above statement also aligns with our concerns and experiences outlined in one of the following sections headed 'Psychopathic tendencies of 100% profit driven multinational corporations such as Ark Energy'.

Decisions to delete or relocate turbines of greatest impact from the proposal to minimise adverse impacts on the highest density of surrounding residents to the east, north-east have not occurred during the preliminary scoping, siting and design phase as required by the guidelines and Bulletin and this has instead been left to DPE to determine which occurs several years after project initiation and at the very end of the assessment process. It is clearly apparent that Ark Energy wants to leave all their options open, increasing their chance of maximising the number of turbines on the project site at the expense of our community. This has had devastating adverse impacts on Burrendong SOS members who are suffering for YEARS - uncertainty, anxiety and stress, as to whether they have a future on their land and multi-generational properties, should the project proceed based on its current design, with turbines proposed too close to their homes.

To be clear, as evidenced above - non-associated landowners were prevented from contributing to the projects preliminary siting and design and associated 'Visual Impact Survey', in non-compliance with the requirements of the Bulletin and the Undertaking Engagement Guidelines for State Significant Projects. Therefore, the project has failed with regard to notification and community engagement for SSD.

Landscape Assessment Values – Failure

As detailed via above subheading 'Notification, Community Engagement and Visual Impact Survey – Failures', the majority of surrounding non-associated landowners and residents were not given an opportunity to contribute to the Visual Impact Survey (completed in January 2021) that allegedly informed Moir LA's LVIA's landscape assessment values.

Landscape assessment values should be informed and determined by impacted landowners and the local community, not MoirLA that is not independent and is clearly biased in favour of the proponent.

Landscape Character Unit Scenic Quality Ratings – Failure

The LVIA fails in its independent assessment of Landscape Character Unit Scenic Quality Ratings. Ratings appear grossly biased in favour of the proponent. Burrendong SOS requests an independent review of all Landscape Character Unit Scenic Quality Ratings.

An example of this failure is the LVIA Landscape Character Unit Scenic Quality Rating of "moderate" provided for LCU07- Worlds End, which should be rated "high".

The LVIA provides the following assessment for the LCU07-Worlds End:

(LVIA Pp32): Tabled overview of Landscape Character Units. LCU07 – Worlds End:

> ***Overview:*** *Worlds End is a small LCU defined by the valley defined as Worlds End. Land is typically characterised by a valley floor with dwelling utilised as weekenders.*
>
> ***Scenic Quality Rating:*** *Moderate*

(LVIA P88):

> ***Overview of Potential Visual Impact:*** *The Worlds End LCU is a small area characterised by the valley floor associated with the Meroo River to the east of the Project Site. The LCU has a number of isolated weekenders and dwellings accessed via a locked gate on Worlds End Road. The Project is likely to be visible to varying degrees to the west of the LCU."*

Landscape Scenic Integrity: *Land within the LCU is generally accessible to landowners with access via a locked gate on Worlds End Road. The LCU is characterised by the valley floor with steep, vegetated hills to the west generally containing views. Dwellings are generally located along the valley floor associated with the Meroo River, with dense riparian vegetation limiting views.*

Key Landscape Feature: *The key landscape features of this LCU are the steep vegetated hills to the west of the Meroo River (associated with Canning Sugarloaf). Views to the Project will be limited by the steep topography and vegetation typical of the LCU.*

LCU07 is characterised by the high scenic quality natural landscape feature - the Worlds End Ridgeline, not "the valley floor" as suggested by MoirLA!

Figure 7: *View to towards the Project Site and the Worlds End Ridgeline (illustrating the High Scenic Quality of LCU-Worlds End Valley), taken from the north-east of the Ridgeline (and project site) looking West from adjacent high country at No.430 Worlds End Road, Worlds End. The Meroo River and non-involved dwellings are situated along the base of this ridgeline and are designed and orientated to enjoy unobstructed views to this high quality natural landscape feature.*

Note: MoirLA has identified the 'Worlds End Ridgeline' via LVIA *Figure 12: Existing Landscape Character and Key Features* Map (Extract below), yet refuses to acknowledge the significance of this ridgeline in the LCU07- World End description.

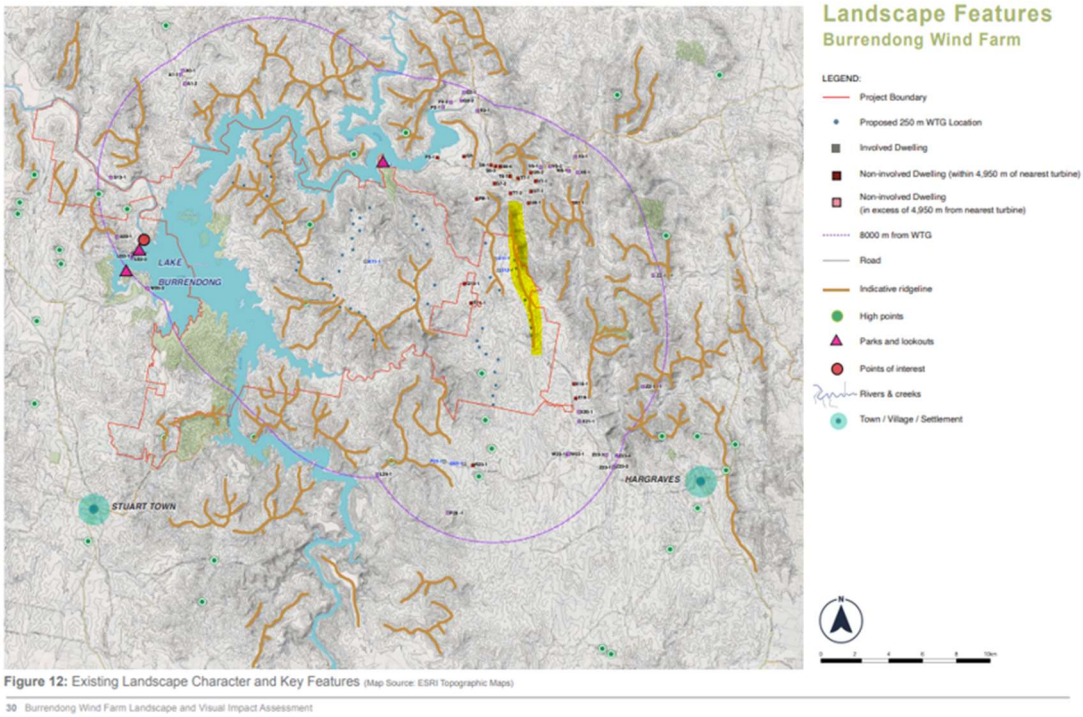


Figure 8 *- Worlds End Ridgeline location highlighted yellow. Extracted from Pg 30 of LVIA – Figure 12: Existing Landscape Character and Key Features Map*

The Worlds End Ridgeline is zoned C3 Environmental Management under MWRLEP. The proposal does not meet the following objectives of this zone:

- *To protect, manage and restore areas with special ….. aesthetic values*
- *To provide for a limited range of development that does not have an adverse effect on those values.*

250m high industrial turbine Nos 49, 50 and 53 to 61 proposed to sit along and parallel to the Worlds End Ridgeline, will tower above the ridgeline and over 1/2km into the air (to their 'tips') above the relative level of the majority of dwellings located in the eastern valley below.

Dwellings in proximity to the Meroo River have been designed and orientated to enjoy significantly unobstructed views to the majestic Worlds End Ridgeline. A recommendation to screen views to this ridgeline and the sky is neither reasonable nor a viable visual impact mitigation measure for the majority of dwellings located within LCU07.

There are permanent residents occupying dwellings within LCU07. Whether a dwelling is utilised permanently or otherwise and the existence of a gate on rural land, is not in our opinion a matter for consideration in determining scenic quality ratings.

Landowners have informed MoirLA that the key landscape feature of LCU07 is known locally as the "Worlds End Ridgeline". MoirLA appears to refuse to acknowledge community feedback in this regard.

The Worlds End Ridgeline provides an opportunity to protect and screen (eliminating or significantly reducing) visual impacts from the project for the majority of non-associated dwellings located to the north-east of the project site - If turbine Nos 49, 50 and 53 to 61 were deleted from the project plan. These turbines should have been deleted from the project at the preliminary siting and design stage of the project. However, non-associated landowners were prevented from providing input at the preliminary siting and design stage and via the Visual Landscape Survey due to ineffective project notification of surrounding landowners and the fact that turbine Nos 53-61 were incorporated onto the project map later in the process precluding preliminary community engagement as required by the Bulletin and Engagement Guidelines for SSD.

Burrendong SOS have allocated the following (star) ratings for the LCU07-Worlds End based on DPE's 'Visual Reference for Scenic Values' below – Reflecting the fact that it has a High Scenic Quality Rating

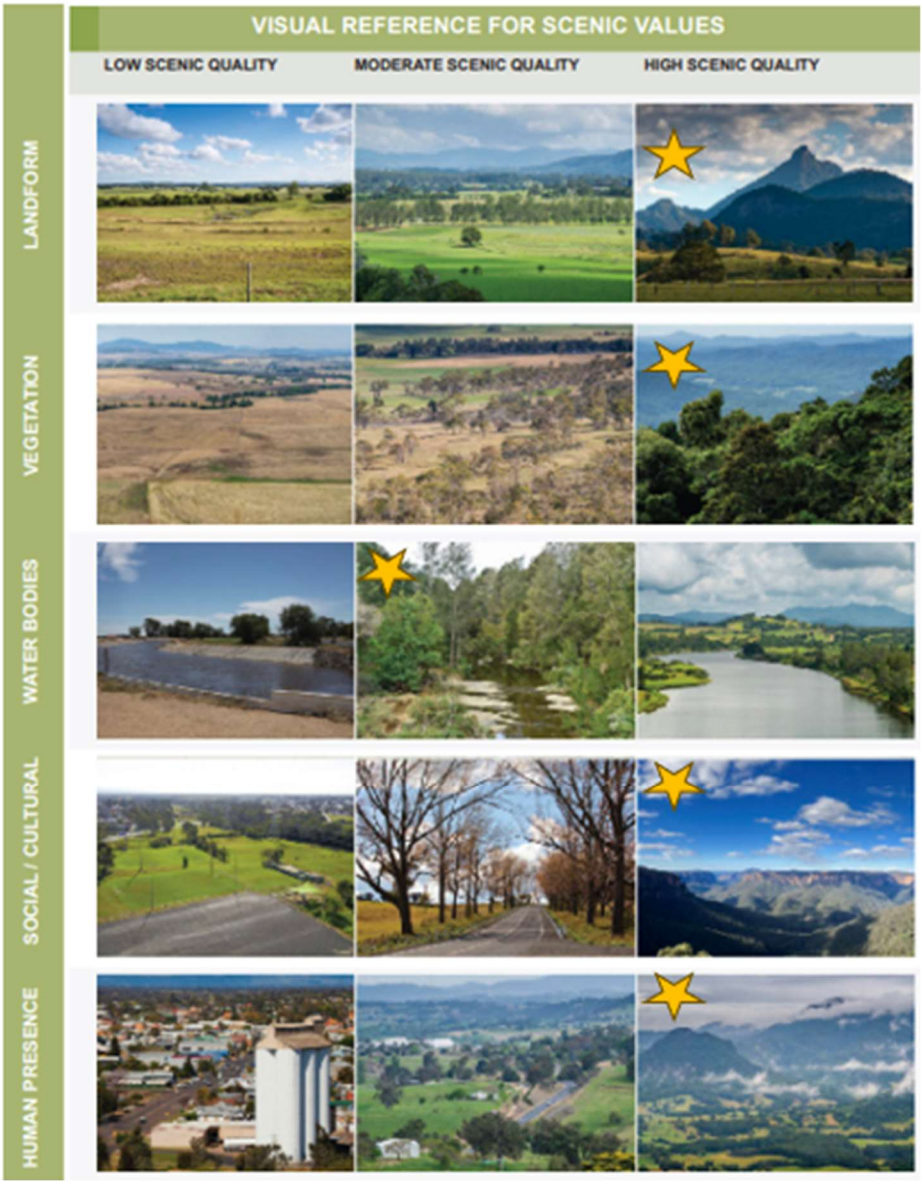


Figure 9 – *Visual Reference for Scenic Quality Ratings (Source DPE 2022) – Burrendong SOS have allocated star ratings for the LCU07-Worlds End Ridgeline – Reflecting a High Scenic Quality Rating*

Public Viewpoint Analysis – Failure

The EIS does not meet the Bulletin requirements because, it fails to identify and analyse the worst-case public viewpoint scenarios. Burrendong SOS requests that the Public Viewpoint Analysis and selected locations be independently assessed.

For example, in our opinion, the worst-case public viewpoint location for LCU07-Worlds End is marked with a pink dot on the below map - to the east of Worlds End Ridgeline and the Meroo River, and affords a High Visual Influence Zone (VIZ) rating of 1 for LCU07. Even though the proponent consultant visited the pink dot location in March 2023, it selected an alternate public viewpoint (BWF15) with a lower visual impact and assigned a low VIZ rating of 3 for LCU07- Worlds End. The description of BWF15 in the LVIA fails to identify the Worlds End Ridgeline that is highly valued by surrounding landowners and residents. This deviates from the worst case scenario analysis required by the Bulletin.

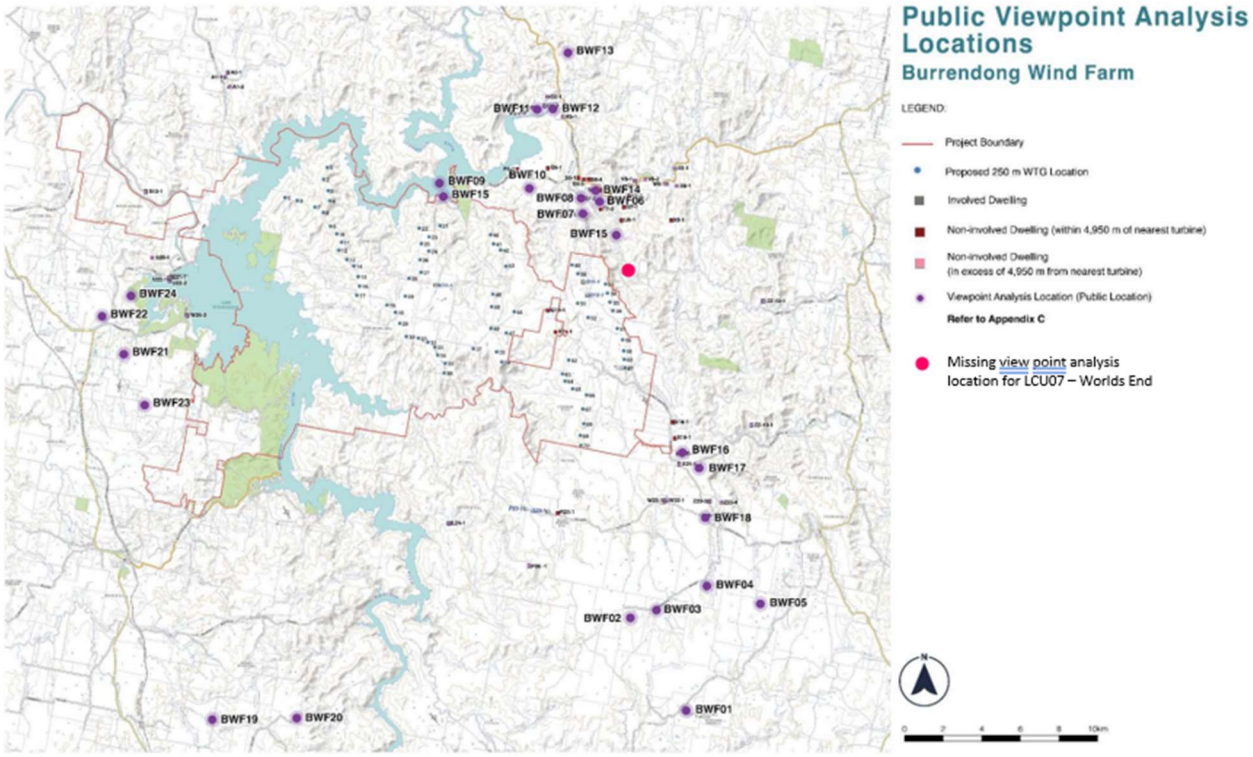


Figure 6-8: Location of public viewpoints (MLA, 2023)

Figure 10: *Burrendong Wind Farm EIS – Public Viewpoint Analysis Locations, Burrendong Wind Farm (P118). Modified by identifying missing public viewpoint location.*

Non-associated Dwelling Visual Impact Assessment – Failures

As discussed earlier in this submission, over 30 dwellings have been identified as missing from the LVIA maps and visual assessments (See Figure 1 of this submission). This is a clear failure of the LVIA.

Of the few non-associated dwellings that have been identified and assessed in the LVIA, a review has identified many instances where such visual impact dwelling assessments appear incorrect. For example, but not limited to – Dwelling U8-1:

- is 3.35km from closest turbine No 53, not 3.41km as stated in the LVIA. 100m micro siting opportunity could reduce this distance further.
    - Dwellings located a distance of 3.35km or less from a turbine, pushes them below the "black line", with the Bulletin identifying them as has having higher visual impact and requiring greater focus on siting and design and mitigation measures.
    - 100m micro siting could in fact result in 4 turbines being located within 3.35km of Dwelling U8-1, not "Nil" as stated by the EIS.
- will see turbines in 3 x 60° sectors (including 1 x 60° sector from the Piambong Wind Farm proposal). Not 1 x 60° sector as stated.
    - Dwellings with turbines in 3 x 60° sectors or more require greater assessment of impacts and consideration of mitigation measures in accordance with the Bulletin.
- has been designed, orientated and elevated to enjoy unobstructed views to the Worlds End Ridgeline (considered a high scenic quality natural landscape feature with its aesthetic values protected by MWLEP - C3 Environmental Management Zone objectives).
- 250m high industrial scale turbines are proposed along the Worlds End Ridgeline and will tower over 1/2km into the air above the existing ground level of dwelling U8-1 located in the valley below. These turbines will convert a 100% natural outlook with no man-made structures into an

'industrial' landscape, with lighting and an 'urban' appearance, that will detract significantly from the natural still serenity of the ridgeline during the day, and enjoyment of the dark sky for star gazing at night.

- The LVIA suggests the turbines will not alter the scenic integrity of the landscape. In our opinion this is obviously simply incorrect.
- The elevated position of dwelling U8-1 and associated entertainment veranda, precludes screen planting as a viable visual impact mitigation option. It appears the "low visual impact rating" for dwelling U8-1 is an attempt to obfuscate mitigation responsibilities of the proponent. This dwelling has a "high visual impact rating".
- In support of the above point, dwelling U7-1 to the north of dwelling U8-1 has a greater setback to turbines than dwelling U8-1, yet was assessed as having a "moderate visual impact rating" (logic says it should be high) with an unreasonable recommendation to mitigate visual impacts by screening views from the dwelling to the ridgeline with tree planting. It is questionable why dwelling U7-1 was given a "moderate visual impact rating", yet dwelling U8-1 that is closer and has unobstructed views to the turbines was given a "low visual impact rating". Is it only because there was an opportunity to recommend vegetation screening as a suggested visual mitigation measure for U7-1?
- The photomontage provided presents an unrecognisable view from dwelling U8-1's entertaining veranda off the main living area. Turbines are also depicted as white against a white sky making them almost invisible in the image. This is at the very least a mischievous representation.

MWRLEP C3 Environmental Management Zone Objectives - Failure

The LVIA Pp27 refers to irrelevant Wellington LEP zoning objectives, noting the Wellington LEP does not apply to the project site.

MWRLEP C3 Environmental Management Zone objectives are:

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To manage development within the water supply catchment lands of Windamere and Burrendong Dams, to conserve and enhance the district's water resources.*

DRLEP C3 Environmental Management Zone objectives are:

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To allow for development that is compatible with the flood hazard of certain areas.*
- *To provide for a range of recreational activities that do not have an adverse effect on areas with environmental and scenic values.*
- *To recognise the environmental significance of certain areas.*
- *To minimise the adverse effect of development on the salinity levels of certain land.*

The proposal does not meet and will serve to detract from the C3 Environmental Management Zone objectives of these LEPs.

Voluntary Neighbour Agreements - Failure

Although suggested as a 'Local Benefit' on Pp38 of the EIS, a brief word search on 'voluntary neighbour agreements' reveals empty promises.

To the best of our knowledge, no non-associated voluntary neighbour agreements for surrounding landowners who will be adversely impacted by turbines proposed too close to their homes have been forthcoming from Ark Energy to date.

Adverse Impact from Aviation Lighting and Dark Sky- Failure

- Detail of the location and number of lights on each turbine / hub / blade and whether they flash or are on permanently etc has not been provided in the LVIA and is required.
- Concern that shielding of lighting on top of a ridgeline that is setback 1.2km to 3.5km from some dwellings in a valley below, towering above them by over 1/2km into the air will have worse implications for surrounding landowners, re-directing light down onto their houses. Shielding of lights that results in light being directed downwards is unacceptable.
- Surrounding landowners appreciation of the characteristic dark sky and highly valued star gazing opportunities from their properties will be destroyed.
- P131 of the EIS suggests an amelioration measure to reduce light pollution would be to space aviation lights over the array of turbines, particularly at the extremities. This is highly concerning as the 10 turbines proposed to the far east extremity of the subject site along the Worlds End Ridgeline are closest to the highest density of dwellings to the north-east of the project site, and this indicates they will have aviation lighting.
- The Mudgee Observatory must be consulted. This will have adverse impacts on tourism, with the Mudgee Observatory located only approximately 10km from the far north-eastern row of turbines on the project site.
- What implications will turbine lighting have on the habitat of nocturnal threatened and critically endangered species such as Koalas and Sugar Gliders?
- If this development proceeds, there must be a condition of consent requiring night lighting only be activated when aviators are flying in the vicinity of turbines. Lights must be turned off at all other times.
- Meteorological Masts - Given a low rating for visual impact. As these are at least 150m tall they will require a light at the top. This light will have a visual impact at night and impact for surrounding dwellings has not been assessed.

Cumulative Impact Analysis for Non-Associated Dwellings within 4,950m of proposed turbines - Failure

Burrendong SOS has undertaken a cumulative impact analysis on non-associated dwellings within 4,950m of turbines utilising data available in the LVIA. This analysis has been undertaken by Burrendong SOS as the Proponent has failed to do so and has ignored Burrendong SOS's requests to date to remove turbines of highest cumulative visual (and other) impacts from their proposal up front in line with the following objective of the Bulletin, to:

- *facilitate improved wind turbine and ancillary infrastructure siting and design during the pre-lodgement phase of a project, and encourage early consideration of visual impacts to minimise conflicts and delays where possible, and provide for a better planning outcome;*

Data utilised in the below analysis includes:

- Information from the LVIA Tables 12 and 13 (Pp 50-60)

- MoirLA's Wireframe modelling to identify worst case scenario potentially visible turbines from non-associated dwellings based on topography. (LVIA Attachment D)
- MoirLA's Preliminary Assessment Tool 2 – plotting of turbines on aerial photograph with distance radius's to determine distance of turbines from dwellings (Within 3,350m; 3,350m to 4,950m; and 4,950 to 8,000m) (LVIA Attachment D)

Noting, MLA's LVIA is deficient as it only identifies and provided visual impact assessment data on 20 dwellings within 4,950m of the project site that have been the subject of a detailed visual impact assessment. There are in fact over 50 non-associated dwellings within 4,950m of proposed turbines and more out to 8000m of the project site that still require detailed visual, noise and other impact assessments based on the legally recognised definition of a dwelling, as outlined in Turnbull Planning International Pty Ltds submission to this EIS. The LVIA is also deficient as it does not take into account cumulative visual impacts of turbines proposed for e.g. the adjoining Piambong Wind Farm Proposal as detailed in the following section of this submission.

As such, we could only base this analysis on the 20 non-associated dwellings with currently available visual impact assessment data in the LVIA and reserve the right to update the below analysis if and/or when the LVIA is significantly updated to reflect all land uses, including dwellings and turbines surrounding the site as required by the EP&A Act.

An analysis of what turbines could potentially be viewed (worst case scenario) from the highest number of non-associated dwellings within 4,950m (cumulative visual impact) is listed below from highest to lowest as follows:

- Turbine No.49 (could potentially be viewed from 17 out of the 20 non-associated dwellings)
- Turbine No.50 (could potentially be viewed from 15 out of the 20 non-associated dwellings)
- Turbine No.53 (could potentially be viewed from 13 out of 20 non-associated dwellings)
- Turbine No.54 (could potentially be viewed from 14 out of 20 non-associated dwellings)
- Turbine No.55 (could potentially be viewed from 14 out of 20 non-associated dwellings)
- Turbine No.56 (could potentially be viewed from 14 out of 20 non-associated dwellings)
- Turbine No.57 (could potentially be viewed from 11 out of 20 non-associated dwellings)
- Turbine No.58 (could potentially be viewed from 9 out of 20 non-associated dwellings)
- Turbine No.42 (could potentially be viewed from 8 out of 20 non-associated dwellings)
- Turbine No.41 (could potentially be viewed from 7 out of 20 non-associated dwellings)
- Turbine No.43 (could potentially be viewed from 7 out of 20 non-associated dwellings)
- Turbine No.40 (could potentially be viewed from 6 out of 20 non-associated dwellings)

Further, the following table provides an analysis of the maximum potential reduction in cumulative visual (and other) impacts for these 20 closest non-associated dwellings, IF the above listed twelve (12) out of the seventy (70) proposed turbines were deleted from the Burrendong Wind Farm Proposal **(I.e. Deletion of Turbine Nos. 40, 41, 42, 43, 49, 50, 53, 54, 55, 56, 57, 58).**

The below tabled analysis illustrates that **if the above listed 12 turbines were deleted from the proposal, this would significantly reduce cumulative visual (and other) impacts for surrounding non-associated dwellings within 4,950m** as follows:

- 15 out of the 20 closest non-associated dwellings would have turbines currently proposed to be located within 4,950m - ELIMINATED (for 12 dwellings) and significantly reduce down to one (1) turbine within 4,950m for 3 dwellings.

- 7 out of the 20 closest non-associated dwellings would have potential worst case scenario visual impacts ELIMINATED**.**

- 13 out of the 20 closest non-associated dwellings would have potential worst case scenario visual impacts either ELIMINATED or SIGNIFICANTLY REDUCED by 80%; 75% or 70%.

- 16 out of the 20 closest non-associated dwellings would have potential worst case scenario visual impacts either be eliminated, signification reduced or halved.

This analysis provides a compelling supporting cumulative impact assessment argument as to why turbine Nos. 40, 41, 42, 43, 49, 50, 53, 54, 55, 56, 57, 58 should be deleted from the proposal, to facilitate improved wind turbine siting and design and provide a better planning outcome for the surrounding impacted community and landowners.

CUMULATIVE VISUAL (AND OTHER) IMPACT ANALYSIS **KEY:** • **Blue = Turbine ID Number of Turbines that may be visible within 3,350m of a Dwelling;** • **Yellow = Turbine ID Number of Turbines that may be visible within 3,350m to 4,950m of a Dwelling;** • **Grey = Turbine ID Number of Turbines that may be visible within 4,950 to 8000m of a Dwelling.**				
Dwelling ID.	**Identification of which of the 12 turbines recommended for deletion may be visible from each non-associated Dwelling.**	**Turbines potentially left visible from each dwelling if 12 identified turbines were deleted.**	**Commentary on potential reduction of visual impacts if 12 identified turbines were deleted from the project.**	**Number of Turbines remaining / removed within 4,950 of a dwelling** **– IF Turbine Nos. 40, 41, 42, 43, 49, 50, 53, 54, 55, 56, 57 and 58 were deleted from the project.**
R8-1	**49, 43**	**Nil**	**Visual Impact Eliminated**	**Remaining: 1 Turbine (No.51)** **Removed: 9 total** • 7 within 4,950m (Turbine Nos.40,41,42,43,5354, 55) • 2 within 3,350m (Turbine Nos.49 and 50)
T7-2	**49; 50**	**Nil**	**Visual Impact Eliminated**	**Remaining: Zero (0)** **Removed: All 5 turbines** • 4 within 4,950m (Turbine Nos.50,53,54,55) • 1 within 3,350m (Turbine No.49)
U8-1	**49, 50, 53,54,55,56,57 ,58**	**Nil**	**Visual Impact Eliminated**	**Remaining: 1 Turbine (No.51)** **Removed: 6 total** • 3 within 4,950m (Turbine Nos.54,55,56) • 3 within 3,350m (Turbine Nos.49,50,53)

T6-1	40, 49, 50, 53,54,55,56,57 ,58	**Nil**	**Visual Impact Eliminated**	**Remaining: Zero (0)** **Removed: All 3 turbines** • 3 within 4,950m (Turbine Nos. 49,50,53)
T7-1	41,42, 49, 50, 53,54,55,56,57 ,58	**Nil**	**Visual Impact Eliminated**	**Remaining: Zero (0)** **Removed: All 3 turbines** • 3 within 4,950m (Turbine Nos. 49,50,53)
S7-2		**Nil**	**Visual Impact Eliminated**	**Remaining: Zero (0)** **Removed: All 6 turbines** • 6 within 4,950m (Turbine Nos. 40, 41, 42, 49, 50 and 53)
V7-1	41,42,43,49, 50		**Visual impact Eliminated**	**Remaining: Zero (0)** **Removed: All 3 turbines** • 3 within 4,950m (Turbine Nos. 49,50,53)
S6-4	40, 41,42,43,49, 50, 53,54,55,56	44,45	**Visual impact 80% reduced.**	**Remaining: Zero (0)** **Removed: All 2 turbines** • 2 within 4,950m (Turbine Nos. 49 and 50)
Q5-1	40, 41,42,43, 49, 50, 53,54,55,56	25; 51	**Visual impact 80% reduced.**	**Remaining: Zero (0)** **Removed: All 3 turbines** • **3** within 4,950m (Turbine Nos. 40, 41 and 42)
X8-1	49, 50, 53,54,55,56, 57, 58	51, 52	**Visual impact 75% reduced.**	**Remaining: Zero (0)** **Removed: All 3 turbines** • 3 within 4,950m (Turbine No. 53**)**
U6-2	49, 50, 53,54,55,56, 57,58	51, 52	**Visual impact 75% reduced.**	**Remaining: Zero (0)** **Removed: 1 turbine** • 1 within 4,950m (Turbine No. 49)
S6-1	40, 41,42,43, 49, 50, 53,54,55,56	21, 44,45	**Visual impact 70% reduced.**	**Remaining: Zero (0)** **Removed: All 2 turbines**

				• 2 within 4,950m (Turbine Nos. 49 and 50)
S6-3	41,42,43, 49, 50, 53,54,55,56,57	21,44,45	**Visual impact 70% reduced.**	**Remaining: Zero (0)** **Removed: All 2 turbines** • 2 within 4,950m (Turbine Nos. 49 and 50)
U7-1	41, 42, 49, 50, 53,54,55,56,57 ,58	51,52,59, 60	**Visual impact 60% reduced.**	**Remaining: Zero (0)** **Removed: All 5 turbines** • 5 within 4,950m (Turbine Nos. 49,50,53,54,54)
P5-1	40, 49	21, 22,	**50% reduction in potential visual impact.**	**Remaining: 1 turbine (No.21)** **Removed: 3 turbines** • 3 within 4,950m (Turbine Nos.40,41 and 42)
X18-1	49, 50, 53,54,55,56,57 ,58	51,52, 59,60,61, 68,69,70	**50% reduction in potential visual impact.**	**Remaining: 8 turbines** • 8 turbines within 4,950m (Turbine Nos. 59,60, 61,66,67,68,69,70) **Removed: Zero (0)**
Q13-1	49,50,53,54,55 ,56,57,58,	51,59,60, 62,63,64,6 5,66,67,68	**44% reduction in potential visual impact.**	**Remaining: 18 turbines** • 8 within 3,350m (Turbine Nos.44,45,46,47,48,51,52,62) • 10 within 3,350m to 4,950m (Turbine Nos.37,38,39,59, 60,61,63,64,65,66) **Removed: 12 turbines** • 7 turbines within 3,350m (Turbine Nos. 43,49,50,53,54,55,56) • 5 turbines within 3,350m to 4,950m (Turbine Nos.40,41,42, 57,58)
R14-1	40, 42,43,49, 50,51,52,53,54 ,55,56,57	33,34,35, 36,37,38,3 9,44,45,46, 47,48, 60,61,62,6 3,64,65,66, 67,68,69,7 0	**34% reduction in potential visual impact.** **40, 41, 42, 43, 49, 50, 53, 54, 55, 56, 57, 58**	**Remaining: 19 turbines** • 11 within 3,350m (Turbine Nos.38,39,44,47,48,51,52,62,63,64 ,65) • 8 within 3,350m to 4,950m (Turbine Nos. 37,45,46,59,60,61,66,67) **Removed: 9 turbines**

				• 5 within 3,350m (Turbine Nos. 50,54,55,56,57) • 4 within 3,350m to 4,950m (Turbine Nos.43,49,53,58)
X19-1	55,56,57,58,	52,59,60, 61,62,63,64,65,66,67, 68,69,70	**30% reduction in potential visual impact**	**Remaining: 6 turbines** • **6 turbines within 4,950m (Turbine Nos. 60,61,67,68,69,70)** **Removed: Zero (0)**
R23-1		62,63,64, 65,66,67, 68,69,70	**No reduction in potential visual impact**	**Remaining: 3 turbines** • **3 turbines within 4,950m (Turbine Nos.68,69,70)** **Removed: Zero (0)**

Figure 11: *TABLE – Cumulative Visual (and other) Impact Analysis*

Note: the recommendation for removal of these 12 turbines is based solely on a cumulative visual (and other) impact assessment basis, and further turbines are also likely required to be deleted from the project on other grounds.

Cumulative Visual Impact Assessment Taking into Account Surrounding Wind Farms – Failure

P450 of the EIS provides what we consider to be a false and misleading statement with regards to the Piambong Wind Farm Proposal:

> *The LVIA (MLA, 2023; Appendix F) notes that the Aquila Wind Farm and Piambong Wind Farm have both been proposed in proximity to the Project and are in the early planning stages and have not provided a project layout to assess potential visual impacts. As such, a detailed assessment of cumulative visual impacts from the two projects will be required as part of the Aquila and Piambong Wind Farm submissions, not this EIS.*

The Piambong Wind Farm was proposed by Vestas in 2020 and is available on NSW DPE's major projects portal, including the turbine layout map and 60° sector visual analysis's for surrounding non-associated dwellings.

The LVIA fails in its cumulative impact assessment as required by the SEARS as it avoids assessment of cumulative impacts with regard the Piambong Wind Farm Proposal.

An example of the failure of the LVIA's cumulative impact assessment is illustrated below for Dwelling U8-1. The cumulative number of 60° sectors that Dwelling U8-1 will see turbines in is 3 x 60° sectors (including Piambong Wind Farm turbines) **NOT** 1-2 sectors as stated in the LVIA. The following 60° diagrams from the proposed Burrendong Wind Farm and the proposed Piambong Wind Farm prove this point.

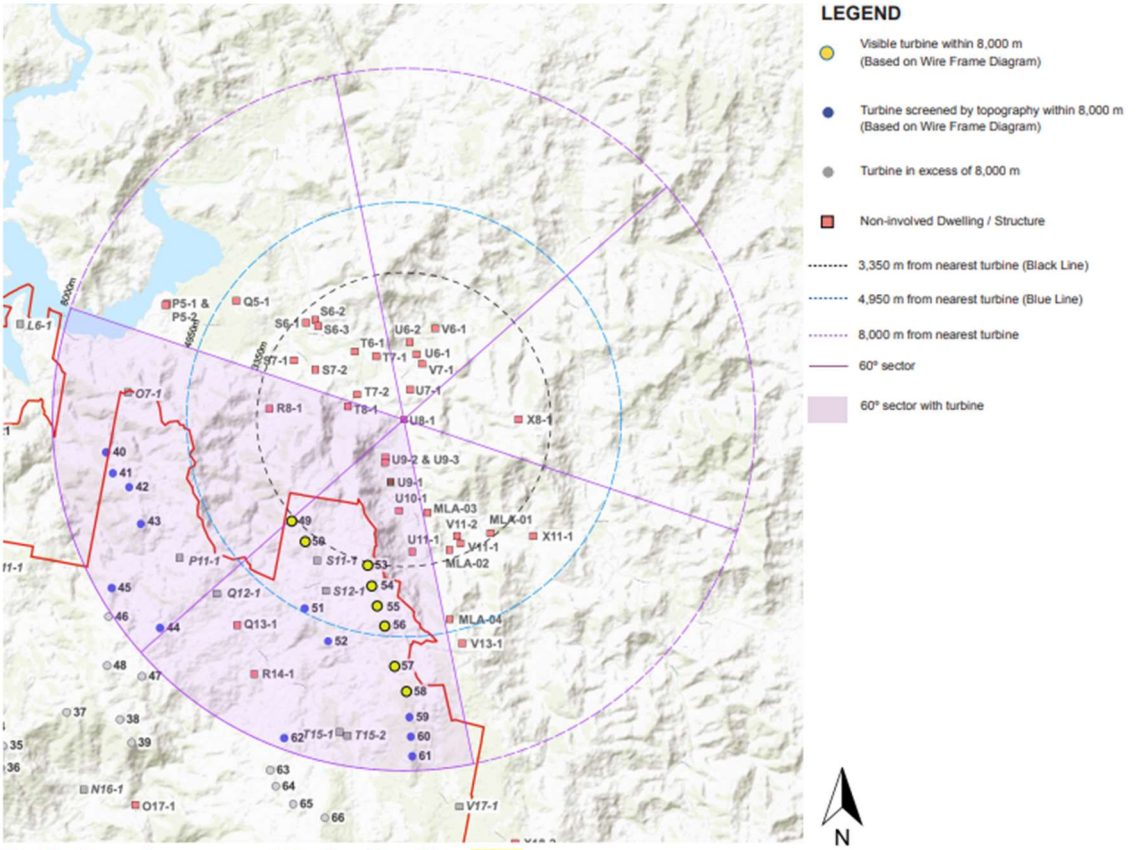
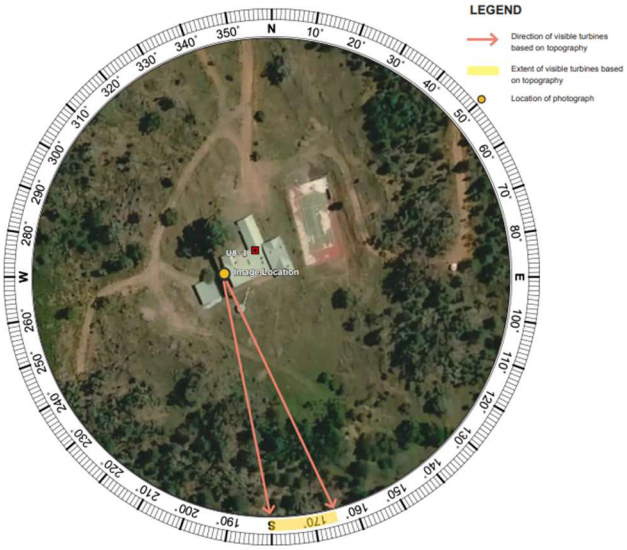


Figure 12: *Dwelling U8-1, 60° Sector Multiple Wind Turbine Assessment for the Burrendong Wind Farm Proposal (LVIA Appendix D)*



The above image extracted from LVIA Appendix D for Dwelling U8-1 is incorrect as it fails to indicate turbine Nos. 49 and 50 that are partially visible from the dwellings primary living area and entertaining deck at 204° and 213° (as depicted in the photomontage). It also fails to incorporate the proposed Piambong Wind Farm turbines that would be visible from the dwellings northern kitchen/dining area windows (see below).

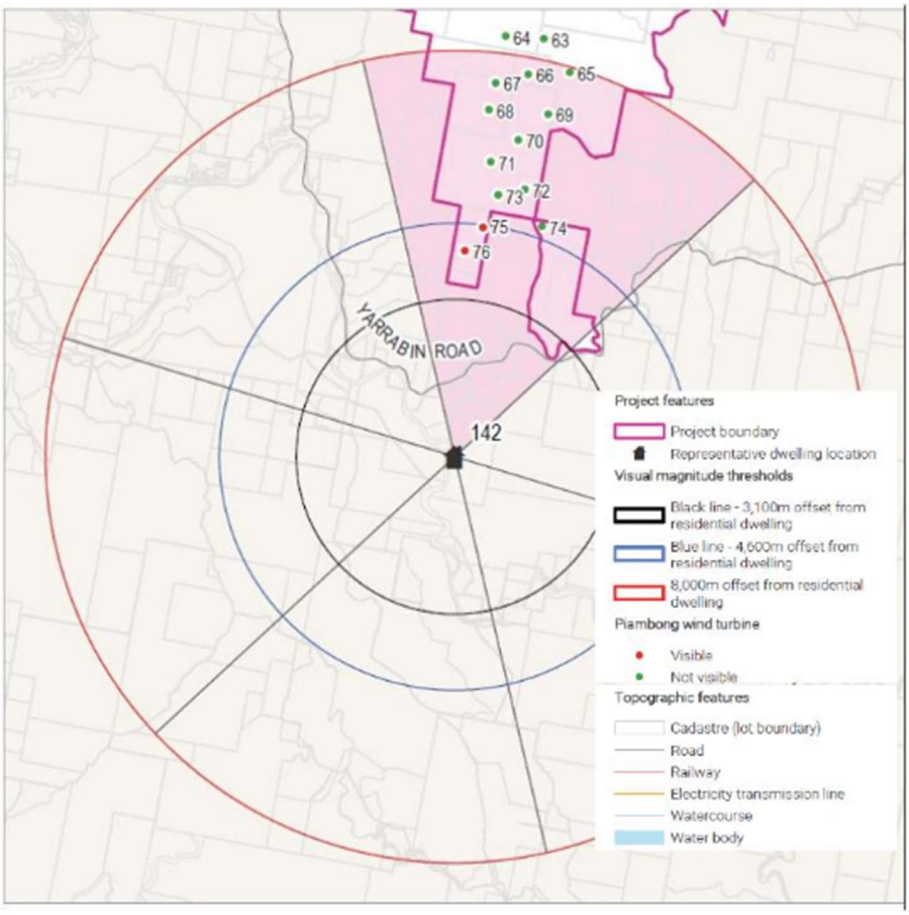


Figure 13: *Dwelling U8-1, 60° Sector Multiple Wind Turbine Assessment for the Piambong Wind Farm Proposal provided by Vestas*

IN summary, the LVIA includes erroneous assessments of views from some non-associated dwellings towards the Burrendong Wind Farm turbines, but it fails to take into account 60° sector views from dwellings towards the Piambong Wind Farm proposal via the 60° sector visual analysis at Appendix D of the LVIA Report.

A number of dwellings located in Yarrabin and Worlds End will be visually surrounded in 3 or more 60° sectors by turbines due to cumulative visual impacts of these two wind farms and the Uungula Wind Farm. This further supports an argument to mitigate cumulative visual impacts on the highest density of dwellings located to the north-east of the project site by the removal of 12 turbines Nos. 40, 41, 42, 43, 49, 50, 53, 54, 55, 56, 57 and 58 from the project.

Tilt Renewables Hargraves Wind Farm Proposal has also not been identified or considered with regard to cumulative visual impacts for landowners to the east and south-east of the project site, it is likely that additional turbines proposed too close to non-associated dwellings to the south-east of the project site should be removal to reduce additional adverse cumulative impacts from that project.

The Burrendong Wind Farm EIS and associated LVIA must be updated as it is does not meet the cumulative impact assessment requirements of the SEARS, the Bulletin, nor the Cumulative Impact Assessment Guidelines for State Significant Projects, 2022 requirements.

The EIS must be amended and re-exhibited to enable the community to consider and provide feedback on correct information.

Micro-Siting Assessment– Failure

They say that no WTG will be moved more than 100m from the GPS coordinates shown in Appendix B.

Moving of any of the WTG or other parts could have a detrimental effect on the neighbouring properties. Then the non-hosting residence will not be able to object to the moving of the WTG or other parts.

It also seems likely that turbines have been indicated on the map to make for example, Dwelling U8-1 fall just outside the 3,350m setback line, favouring the proponent as they have not suggested any mitigation measures for it. Yet, the 100m micro-siting option will in fact mean the turbines can and will likely be constructed closer to dwellings than they have had impact assessments for. Surely in 2023 the final location can be determined prior to the approval.

Shadow Flicker Assessment - Failure

An assessment of shadow flicker has not been undertaken for all non-associated dwellings and properties with dwelling entitlements. Existing dwellings and properties with dwelling entitlements located immediately to the north-east of the Worlds End Ridgeline, appear likely to experience shadow flicker above the acceptable standard based on the EIS P129 Shadow Flicker Diagram.

Worlds End Road, to the eastern side of the Meroo River also was not assessed for Shadow Flicker. This is a dirt access road and is already challenging to navigate without the addition of shadow flicker which will be a safety hazard for the Worlds End community.

Lifestyle Property Impact Consideration- Failure

Properties located directly to the east and north-east of the Worlds End Ridgeline are predominantly not used for primary agricultural production. These are lifestyle properties, with their value based on their quiet, peace and tranquillity, relative isolation, appreciation of the dark night sky for star gazing, bushland views and natural outlooks to the high scenic quality of the Worlds End Ridgeline.

The majority of residences in the Worlds End Valley do not have views to neighbouring residences, they only have natural outlooks that stop at the Worlds End Ridgeline. Conversion of this natural ridgeline view to an industrial one with 250m high wind turbines towering above it, spinning with lights, will undermine the core value of these properties, destroy their lifestyle values and the whole reason why landowners chose to locate there in the first place. It will also have a dramatic impact on these properties' re-sale values. Noting, they are not agricultural properties, they are lifestyle properties.

Photomontage - Failure

Photomontages included in the LVIA do not meet DPE's basic quality standards and are of extremely poor quality. The majority of photomontages provided in the LVIA cannot be relied on as representative views to help inform proposed visual impacts. We request that DPE require the proponent to re-do and re-submit LVIA photomontages, or better yet that an independent LVIA expert provide photomontages.

At the most basic level, turbines should **not** be depicted as white against a white sky rendering them almost invisible in a number of the LVIA photomontages.

Below is an interesting comparative example of two photomontages provided from the west facing entertaining veranda of Dwelling U8-1.

- The first photomontage (below) provided by Epuron (now Ark Energy) dated March 2022 has not been used in the LVIA. Out of interest (although not perfect), it reflects a more recognisable view to the Worlds End Ridgeline (more recognisable to the Landowner) compared to the following

photomontage provided by MoirLA's dated July 2023 that has been included in the EIS LVIA - taken from the same location!

- MoirLA's photomontage dated July 2023 below:
  - Captures land under the veranda, that is land that is not visible from the dwellings main living area within the house.
  - It presents a morphed and unrecognisable view to the Worlds End Ridgeline
  - Turbines are depicted as white on a white sky, making them almost invisible in the photomontage.
  - The ridgeline is somehow made to be out of focus and distant, whereas in reality the ridgeline dominates the view from the dwellings entertainment veranda and internal living area.
  - The foreground appears to be deceptively brought into focus. And a wide angle lens captures land to the right and left that is not highly visible nor a point of focus in reality.
  - Turbines are not depicted at the points of highest visibility.

Figure 14: *Photomontage from Dwelling U8-1 looking south-west towards Worlds End Ridgeline - Produced by Epuron dated March 2022*

Figure 15: *Comparative Photomontage from Dwelling U8-1 looking south-west towards Worlds End Ridgeline - Produced by Moir Landscape Architects dated July 2023 included in the EIS LVIA.*

Details aviation lighting and ancillary infrastructure such as wind monitoring masts have not been included in Photomontage imagery. These should be included to provide landowners with a fair understanding of all visual impacts.

Mitigation Measures (Vegetation Screening) – Failure

Vegetation screening as mitigation needs to be reconsidered.

- Newly planted vegetation takes many years (20 or more years) to grow, often longer than the life of turbines and will not screen turbines as high as 250m proposed on top of ridgelines towering over 1/2km into the air above dwellings located in valleys below.

- If vegetation screening is proposed, this must be accompanied by a Bushfire Assessment Report, ensuring APZ's align with e.g. the NSW Planning for Bushfire Protection Guidelines (including analysis of ability for landowners to evacuate their property in the event of a fire and/or shelter in place).
- Proposed new vegetation screening, if agreed to by landowners, should be multiple rows and should include not just the supply and planting of the vegetation but the watering and care of vegetation until established, as the responsibility of the proponent.
- Proposed mitigation measures for non-associated dwellings outlined in the LVIA such as screen planting has not been discussed with non-associated landowners. If a non-associated landowner does not agree to said mitigation measure, then surely it is not a viable mitigation measure!
- Photomontages illustrating vegetation measures to screen views are false and misleading. Images of vegetation have been strategically superimposed onto photos in exact locations to screen views to turbines. In reality, the way vegetation grows is unpredictable and the density of foliage and its height and width is not guaranteed to screen views to turbines.

Additionally, consideration of the LVIA 'Zone of Visual Influence' map (LVIA Appendix F, Figure F.2) indicates that a significant number of non-involved properties with dwelling entitlements and dwellings within the LCU07 'Worlds End Valley' will be able to view 1-12 turbines. This lower number of visible turbines is reflective of the fact that the Worlds End Ridgeline acts as an effective high scenic quality visual landscape barrier, blocking south-western views from non-involved properties to the majority of turbines proposed on the project site. In this regard, the LVIA assessment fails to consider a key visual impact mitigation option which is to delete turbine Nos 49, 50 and 53 to 61 from the proposal as a viable tool to eliminate and/or significantly reduce visual impacts from the highest density of dwellings concentrated to the north-east of the subject site.

Professional Assessment Skills – Missing Information

The Bulletin, Pp6 requires: *"The name, qualifications and experience of the person preparing the visual assessment (or the principal preparer, if prepared by a team) should be provided, along with the date on which the assessment was completed."*

This information is missing from the MLA's LVIA report and must be provided. It is questionable whether the lead professional signing off on the LVIA has even visited the area.

Noise and Vibration Impact Assessment (NVIA)– Failure

The Burrendong Wind Farm NVIA has been prepared by Marshall Day Acoustics Pty Ltd (MDA). Based on MDA's involvement in *Uren* in which the Court found that MDA's noise assessment reports were non-complaint and plainly flawed and the failings outlined below, Burrendong SOS members have little confidence that a fair and ethical independent NVIA has been provided by MDA for the Burrendong Wind Farm. As such, we request that DPE commissions an independent NVIA for the Burrendong Wind Farm Proposal.

A review of the NVIA prepared by Marshall Day Acoustics Pty Ltd (MDA) identifies the following failings:

- The predictions presented in Noise Assessment are all grounded in a hypothetical turbine model. Historically, there's been acknowledgment that turbine models might undergo changes during the pre-construction tendering process, yet proponents typically neglect to consider the noise impacts associated with detailed design alterations or turbine types. The EIS exemplifies this trend. The proponent openly admits that the Wind Turbine Generator (WTG) model won't be finalised until well after the consent stage, emphasising the need for flexibility in the absence of concrete details during

the consent process. The project, initially labelled "indicative only" at the Scoping Report stage, lacks the definitiveness the community is entitled to expect in the EIS.

Diversity reigns in the selection of models and specifications used for various assessments within the EIS, encompassing sound power output, hub heights for visuals, and greenhouse gas (GHG) emissions calculations. The proponent's justification for this diversity remains unclear.

The absence of a fixed turbine model introduces uncertainty and hinders transparency in noise predictions of the Noise Assessment. This practice raises concerns that Ark Energy is evading genuine accountability for the wind farm's noise impacts, as the assessment may not align with the eventual project turbine. While changes in turbine models post-approval are common in the wind industry, it's misleading to grant approvals without demanding the developer prove, to the satisfaction of the NSW Environmental Protection Agency (EPA) and DPE, that the projected sound levels of the chosen turbine will be equal to or lower than those outlined in the EIS.

The EIS, as a requisite, should encompass comprehensive technical studies, including a precise noise assessment, ensuring communities aren't left in a state of despair when considerations of matters such as accurate sound power levels and tonality are relegated for consideration (compliance testing only) post-approval and/or construction. The same principle extends to wind farm layout and turbine placement, directly influencing potential sound output. The approval of the Burrendong Wind Farm must hinge on the proponent's ability to demonstrate, to the satisfaction of DPE the EPA, that the sound levels of the chosen turbines in the finalised layout meet or fall below those specified in the EIS. This precondition is not a matter of compliance; it's an essential condition for approval before commencing construction.

- The EnVentus V162-6.2MW is noted for having a specified maximum sound power that is comparatively lower than other wind turbines within the EnVentus range. This situation raises the distinct possibility that the designated sound power output might not accurately correspond to the selected turbine. Unless Ark Energy provides a firm commitment that the installed turbine will indeed be the V162-6.2MW, an adjustment to the sound power levels is warranted. This adjustment should factor in the largest wind turbine option potentially installable, coupled with an additional uncertainty level of 2dB for comprehensive consideration.

- The Proponent has selected the Vestas V112-3.3MW Wind Turbine Generator (WTG) for greenhouse gas (GHG) emissions calculations. Yet, surprisingly, the proponent has opted for a different turbine, the EnVentus V162-6.2MW, when determining sound power levels. This prompts the need for an explanation as to why the proponent hasn't endeavoured to generate GHG calculations using the same turbine chosen for assessing sound power levels. It's imperative that the proponent furnishes GHG calculations specifically tailored to the EnVentus V162-6.2MW, offering clarity on this apparent biased incongruity likely favouring the proponents proposal.

- The manipulation of Sound Power output predictions can occur if they are not precisely aligned with the specific conditions of the wind farm. SA 2009 explicitly advocates for a conservative approach in determining the overall predicted level. Regrettably, in the current scenario, certainty is elusive concerning whether the predicted output levels have considered the intricacies of site-specific effects. The complex terrain of the wind farm, characterized by intricate ridge lines and valleys, and the echo effect of the Worlds End Valley (not considered by the NVIA) adds an additional layer of uncertainty. The information provided by MDA regarding relevant adjustments is insufficient to

permit thorough scrutiny, leaving the accuracy of the noise modelling in doubt. Given this uncertainty, it is prudent to assume a minimum 2dB increase to account for potential variations.

- MDA has opted to employ ISO 9613-2 and G=0.5 as the designated ground characterisation, a choice that is subject to strong dispute. This selection deviates from the stipulated Guidelines, as SA2009 mandates the utilisation of hard ground (G=0%). The use of hard ground is known to substantially elevate the predicted sound level. The adoption of a UK practice in this context is deemed incorrect.

- SA 2009 encompasses a segment dedicated to negotiated agreements with wind farm developers. This provision imposes an obligation on developers to convince the planning authority that the negotiated agreements effectively address noise concerns for both hosts and non-associated landowners. These agreements are expected to demonstrate how adverse noise impacts have been tackled. The proponent has failed to meet this stipulation. Additionally, the proposed Guidelines explicitly mandate that negotiated agreements delineate the nature of impacts to which the landowner is consenting. MDA's assertion that landowners with neighbour agreements automatically approve any ensuing noise impact is erroneous. The Noise Assessment must be revised to consider both the nature of the impacts consented to and the sufficiency of mitigation measures.

- MDA has failed to model cumulative noise impacts from not only the proposal Burrendong Wind Farm but also the proposed Piambong Wind Farm and Uungula Wind Farm on non-associated landowners.

- The evaluation of impacts arising from construction traffic on the heavy vehicle route exhibits fundamental flaws and requires a comprehensive overhaul. The assessment hinges on anticipated rises in road traffic flows, yet the existing traffic flow for the heavy vehicle route has never undergone precise documentation and is severely overestimated. Consequently, the entirety of the traffic noise assessment is rendered inaccurate. It is imperative that the proponent furnishes a rectified assessment grounded in the authentic measurement of existing traffic flows.

- The Assessment of Traffic Noise neglects several residences that either fall within or closely approximate the required traffic setback distances. These are homes where families, including those with children, reside. Although these dwellings exist in reality, they seem to be (intentionally?) overlooked by the proponent.

- Burrendong SOS reserve the right to pursue a class action if DPE approves construction of the Burrendong Wind Farm and the resultant turbines create nuisance noise that interferes with the use and enjoyment of their land in a way that is both substantial and unreasonable, including interfering with our basic right to a 'good night's sleep'. Refer to the recent judgment in Uren v Bald Hills Wind Farm Pty Ltd (2022) VSC 145 (Uren).

- The NVIA fails to identify and assess impacts on all non-associated receivers, with some unidentified receivers (dwellings) likely located in areas that will exceed the 35dBA noise level threshold (refer to Figure 2 that maps unidentified non-associated dwellings).

- The NVIA fails to take into account the significant echo effect synonymous with Worlds End Valley. This local phenomena is reflected in the name "Cooees Mountain" which is located immediately to the north of the Worlds End Ridgeline. The rocky granite landscape enhances this echo effect,

bouncing sound and vibrations off the ridgeline and adjacent hills. This echo effect is likely to enhance and amplify nuisance noise impacts for non-associated dwellings located within Worlds End Valley to the north-east of the Worlds End Ridgeline.

- Burrendong SOS members do not consent to adverse nuisance noise emanating from wind turbines located too close to their dwellings and Worlds End Valley. The majority of non-associated landowners currently enjoy a quite isolated natural environment with minimal man-made noise, traffic or otherwise. The proposal represents a significant departure from the current noise levels enjoyed by non-associated receivers.

- If the DA is approved, the following conditions of consent are requested:

    - All baseline noise monitoring and modelling data must be made publicly available in usable detailed analysis format;

    - An independent consultant (not the same Acoustic Consultant who prepared the Burrendong Wind Farm NVIA for the EIS) must monitor and assess post construction noise compliance. (This aligns with independent consultant recommendations of the Australian Energy Infrastructure Commissioner).

Heavy Traffic Vehicle Travel Route and Traffic Impact Assessment – Failure

Local landholders have some serious concerns about the section of Yarrabin Road identified for heavy-duty vehicle action, including hauling turbines:

- The traffic count number utilised is derived from data furnished by MWRC via a monitoring device positioned at the intersection of Yarrabin Road and Hill End Road and the light vehicle route – a whopping 201 each day!! There's a good chance it's an exaggerated figure, given the counters were operational during a timeframe encompassing the Easter break and holidays, a prime season at the Burrendong Dam recreation area.
- Stated baseline traffic counts for this stretch of the road don't tally with the specifics of this particular section. The road here isn't sealed, lacks substantial fencing, has a narrow profile, cattle grids and essentially weaves its way through agricultural lands. The sight of 5 or 6 cars a day is a rare occurrence for the locals.
- The anticipated traffic figures post-construction are unreasonably minimal, despite being in the range of 400 or more. The EIS lacks specific particulars regarding the transportation of waste, sand, cement, water, and aggregate, a significant portion of which is expected to traverse the route designated for heavy vehicles.
- Ark Energy hasn't disclosed that the current road, a Council road (MWRC), often deviates from the official crown road outline – essentially, it's been shaped in convenient spots rather than adhering to the prescribed crown road path. Since the Department mandates transport routes on legal roads, this translates to landowners potentially facing a reshuffling of the roads cutting through their properties. Moreover, a significant portion of the efforts to enhance the road (morphing a narrow dirt track into a secure, sealed road with smoothed-out bends and upgraded crossings) will necessitate gaining entry to private land and securing either title or easement rights. Not to mention impacts to native vegetation and heritage site assessments that have not been undertaken on this provide land. Majority of landowners surrounding the proposal wind farm do not consent to this proposition.

- Consent from landowners to widen the road onto their private land has not been granted. As such, the EIS should not proceed to approval.
- The proponent hasn't engaged in substantial discussions with private landholders, and in certain instances, has neglected to acknowledge or reply to their appeals for a conversation on the matter. At this juncture, the proponent is adamant about not admitting the necessity for fencing on the road. This is agricultural land, livestock will be placed in danger!
- Ark Energy's approach has fallen short of adhering to the prescribed guidelines and their internal charters. Their conduct lacks honesty, transparency and ethical standards. There have been instances where the proponent has misguided Yarrabin Road residents regarding the heavy vehicle route, suggesting that their land might face compulsory acquisition. In fact, it is understood that Ark Energy even suggested in a CCC meeting that they were in negotiations with Mid-Western Regional Council regarding compulsory acquisition for road widening works, which was an outright lie and was later (underhandly?) deleted from CCC meeting notes!
- It's crucial to note that the proponent lacks the authority for compulsory acquisition, a stance reaffirmed by Mid-Western Regional Council, which has explicitly stated that there will be no instances of compulsory acquisition. It is our opinion that it would be unethical for Mid-Western Regional Council to compulsorily acquire land to widen the road on behalf of the interests of a private entity to the detriment of the local community, agricultural properties and businesses in the area.
- Landowners located along this stretch of road, for example a landowner with a house (their children's bedrooms) setback only 80m from the road, have been living with uncertainty for a future on their land for the last three years. This uncertainty should not be allowed to continue. This proposal has had and is continuing to have devastating impacts on our communities mental health.
- The Environmental Impact Statement (EIS) fails to address the consequences of the route taken by heavy vehicles on the well-being of residents and landowners that currently experience a maximum of 5-6 car movements a day. This encompasses disturbances to livestock farmers raising sheep, cattle, and goats, along with potential disruptions to olive groves and a garlic farm etc. Will heavy vehicle truck movements of enormous turbine parts impact landowners sleep? Why hasn't this been covered by the Social Impact Assessment?
- The 'Project Overview' states that project will sustain approximately 250 direct full time positions and indirectly sustain a further 400 full time positions over the construction period. This is a different number than what was stated in the executive summary which states that only 375 positions over the construction period. But the traffic report only has 153 vehicle movements one way per day. So, with up to 650 full time workers on site during construction each car will need to carry 4.24 people each trip. This is not correct. These figures presented in the EIS need to be corrected.
- The current roads system to the site is currently a dangerous road if you come from Mudgee. The roads were not built to carry this volume of traffic. The likelihood of a serious accident is high, with the added danger to construction workers and the local community given the fact that there is no mobile phone reception along the route. What happens if there is an accident with no mobile phone reception?
- Will the school bus service be interrupted?
- Water - They state they need water for the project. They need 972.5ML for the project. How many road trips will this take? This information has not been included in the traffic report numbers.

- Road Base Materials - How many road trips will this take? This information has not been included in the traffic report numbers.
- The EIS suggests that some 3000kgs of material per day is required for the concrete to be delivered. This appears not to have been included in the traffic calculations?
- Internal and External Traffic Management has missed animal impacts and what to do if this happens. This is required.

Community Engagement – Failure

Psychopathic tendencies of 100% profit driven multinational corporations such as Ark Energy

The 2003 documentary "The Corporation," co-authored by University of British Columbia law professor Joel Bakan and filmmaker Harold Crooks, identifies that multinational corporations, driven by a relentless pursuit of maximum profits, exhibit psychopathic tendencies. The film parallels corporate behaviour with traits associated with a psychopath, examining this alignment through the World Health Organization's Personality Diagnosis Checklist from the "Manual of Mental Disorders." That is:

- Callous unconcern for the feelings of others
- Incapacity to maintain enduring relationships
- Reckless disregard for the safety of others
- Deceitfulness: repeated lying and conning others for profit
- Incapacity to experience guilt
- Failure to conform to social norms with respect to lawful behaviours

This documentary provides clarity regarding the psychopathic traits of Ark Energy that we have been repeatedly subjected to during our forced interactions. Examples of these experiences are detailed throughout this submission.

Currently, it is apparent that multinational corporations such as Ark Energy can say anything they like to communities and landowners, they can lie, be recorded with clear evidence of these lies, partake in what on the face of it appears to be criminal behaviour and can get away with it with no adverse repercussions when it comes to the ideological push for 'renewable energy'. There are no real protections in place for rural communities. The Government is allowing multinational corporations such as Ark Energy to run rough shod over us for YEARS at the expense of our mental health and wellbeing.

The only real protection appears to be legal via class actions - at our own expense. This is not fair or just. However, if pressed, we do have the numbers to pursue a class action and will not shy away from it.

We have found that Ark Energy is solely motivated by profits and rather than following the spirit in which Government guidelines and legislation has been written, Ark Energy has actively sort profit enhancing potential loopholes to achieve their financial objectives, to the detriment of rural communities and non-associated landowners. For example, Ark Energy relying on their own interpretation of a definition of a dwelling which is inconsistent with the statutory definition of a dwelling, and as such excluding approximately 38 (or more) non-involved dwellings located within 4,950m of proposed turbines from the Burrendong Wind Farm EIS impact assessments.

Ark Energy (aka Korea Zinc) is not in it for the long haul. IN our opinion, Ark Energy is seeking approval of the Burrendong Wind Farm proposal at minimal expense to them and with minimum care for the community it will impact. Ark Energy plans to immediately on-sell the approval and wash their hands of

the project, leaving behind a trail of environmental destruction for local communities to live with in its wake.

Ark Energy must be factual and truthful about their projects. We are sick and tired of the "spin" presented by Ark Energy which is smattered throughout the EIS. Ark Energy has been caught in the act of obfuscation, misrepresentation, misleading statements and assessments by not just our community but other communities impacted by their Wind Farm Proposals such as Chalumbin Wind Farm and Bowmans Creek Wind Farm etc. It is little wonder that Ark Energy (formerly Epuron) has been tarnished by an industry reputation of being considered the "bottom of the barrel" in terms of wind energy providers in Australia.

Ark Energy's Acts of Obfuscation, Misrepresentation, Misleading Statements, Veiled Threats and potentially a Criminal Offence regarding their Burrendong Wind Farm Proposal = Zero Social Licence

Ark Energy has repeatedly demonstrated ZERO social licence. They have threatened and attempted to silence community members and have continually worded correspondence in a gaslighting, deflective and deceitful way to avoid clarity and responsibility.

Here are a few examples:

- Ark Energy (Burrendong Wind) has recently attempted to state broadly at a community meeting that turbines had been deleted from their proposal due to studies and reports undertaken, however we have found the large majority of the turbines deleted were because a potential host refused to host turbines and prevented an access corridor through their land, resulting in the deletion of approximately 30 turbines from the site plan.
- Community Consultative Committee (CCC) meeting minutes for the Burrendong Wind Farm proposal have been edited to remove details and questions raised in the meetings that do not support the proponents proposed project. They have also been edited to cover up a lie Andrew Wilson from Ark Energy stated at the meeting when he said Ark Energy was in negotiations with Mid-Western Regional Council regarding compulsory acquisition of private land for road widening works. This speaks volumes about the disturbing bias and dodge dealings the CCC chair has demonstrated in favour of the proponent.
- On 8 November 2022, Ark Energy provided Burrendong SOS with a clear recorded contractual agreement and commitment THAT: when Moir Landscape Architects (Moir) are out in the field, Ark Energy will instruct Moir to undertake photomontages from all dwellings within 3.35km of proposed turbines, based on landowner requests (Meeting recording times: 0:55:26 – 0:56:43 & 0:58:20- 0:58:30) and photomontages from dwellings outside of 3.35km will be provided on a case-by-case basis (Meeting recording time: 0:58:33) and that a copy of these photomontages will be provided to surrounding landowners prior to Ark Energy's lodgement of their EIS to NSW DPE for public exhibition, so that our community members can understand and provide feedback on the visual impacts from their dwellings.

  Skip to today's date and several landowners who provided Moir (on behalf of Ark Energy) access to their land on Monday 27 March 2023 in exchange for the agreed provision of photomontages, STILL have not received photomontages. And Ark Energy has reverted to disputing the statutory definition of a dwelling, even though that matter was resolved on Friday 24 March 2023 prior to agreed site visits.

It is grossly apparent that Ark Energy is still disputing this because Ark Energy does not want to provide photomontages from all dwellings, especially from those in Worlds End, as some dwellings are located within 1.2km to 2.5km of Ark Energy's 250m high turbines that are proposed along the top of the Worlds End Ridgeline, towering over 1/2km up to 3/4km into the air above the relative level of some dwellings located in the eastern Worlds End valley below. Obviously visual impact will be horrific!

As photomontages from landowners' residences have not been provided to landowners PRIOR to Ark Energy's submission of the EIS to NSW DPE for public exhibition, evidence indicates that Ark Energy (via Moir Landscape Architects) has gained access onto landowners' properties by deception, and in doing so have acted fraudulently, which is a criminal offence under Section 192E of the Crimes Act 1900 (NSW)

Ark Energy is currently the subject of an open complaint with the Australian Energy Infrastructure Commissioner (AEIC) regarding this indicative Criminal Offence. Evidence of this is clearly outlined and provided in Burrendong SOS's 'photomontage' complaint lodged with the AEIC on 27 June 2023.

- Ark Energy's veiled threats presents as an assault to our democracy. Ark Energy is attempting to threaten landowners, almost like blackmail - that if landowners (with dwellings in close proximity to turbines), don't hand over their historic or other dwelling entitlement / development approval information to prove themselves, then Ark Energy won't provide them with e.g. noise and visual impact assessments and associated photomontages, and even worse taking it one step further, landowners have been made fearful that if they voice their opposition to the wind farm, Ark Energy (a South Korean owned multinational mining corporation) will take steps to try and have them evicted from their multigenerational homes and properties, causing them immense fear and distress. Noting some landowners dwellings are over 100yrs old!

  This situation flagrantly violates our communities freedom of speech and democratic rights, contradicting EP&A Act, EP&A Regulation, SSD Guidelines, and NSW Wind Energy Framework consultation and assessment requirements.

Slave Labour

A condition of consent is required that turbines and associated infrastructure must be demonstrated to have been ethically sourced. E.g. not:

- Sourcing cheap WTG parts from China – Manufactured by Uyghur's in concentration camps.
- Sourcing raw materials like Cobalt from the Congo using child slave labour.

Social Impact Assessment – Failure

Biodiversity Impact Assessment – Failure

We refer you to issues raised by Hugh Taylors (Burrendong SOS Member) in his submission to this Burrendong Wind Farm EIS with regards to Biodiversity.

Habitat loss / Nighttime Lighting / Nuisance noise

C3 Environmental Management Zoned Land

Koalas

Red Tail Cockatoos

Wedge Tail Eagles

Micro Bats and Bats

Greater Gliders

Insect Kill

Road Corridor Road Widening Works Biodiversity Assessment- Failure

No assessment has been provided on vegetation and tree removal required for road widening works outside of the project site.

Native vegetation along road corridors play a vital roll as habitat connection corridors, especially where paddocks adjoining these road reserves have been cleared. There has been no consideration or biodiversity assessment of land within these road corridors that are proposed to be cleared and widened.

Twelve Mile road goes through private property that has not been identified in the traffic report or in the biodiversity report. This omission needs to be included in the EIS. No assessment has been made of the removal of trees along the roadways within private properties or the pruning of trees on private and public property.

The massive increase in traffic along e.g. will have an additional devastating impact on animals found within the road biodiversity corridors.

IdentiFlight Technology Required as a Condition of Consent

Given the biodiverse are on which the Burrendong Wind Farm is proposed, if approved, a condition of consent should require the upfront deployment of IdentiFlight technology and be turned off at night. This is the very least that should occur in the midst of an extinction crisis.

Internal Roads

No detailed design of maps of roadways, level changes or other important details have been provided. The effects of level changes on retained native vegetation has not been included. The number of trees being either removed or modified has NOT been included as well as the number of replacement trees has NOT been identified and the species of trees to be replanted have NOT been identified.

- No landscape plans have been submitted for assessment.
- No tree removal plan has been submitted for assessment.
- Not tree trimming plan has been submitted for assessment.

Vegetation Clearance- Underground Transmission Lines and WTG's

The EIS indicates that no trees or vegetation will have to be removed for the installation of the below ground transmission lines and WTG's. How will Ark Energy and Eco Logical achieve this?

Animal Impacts and Injuries

There is no discussion or mitigation measures for animal impacts and what to do if this occurs. This needs to be addressed in this section.

WTG's Localised Climate Change and Drought Affect

The EIS states that the wind will be disturbed by the WTG for up to 2.88km from a WTG. That would mean that the air space over many of the dwellings will be disturbed. This could have major consequences on the climate at our non-associated properties and dwellings. It is understood this can create a localised drought effect.

Landowners surrounding the site are not connected to town water supply. This will impact our drinking water and general water collection supplies and the fertility of our land.

Also, with multiple WTG's proposed in close proximity of our dwellings (noting many dwellings are still yet to be identified or assessed for impacts), what will be the cumulative effect of this?

No landowner compensation has been offered. We do not consent to this dramatic impact on the future use and productivity of our properties.

The disturbed air space needs to be addressed. It has not even been mentioned. This is a serious miss in this EIS report. Pier reviewed studies are required.

This disturbed air space will also have serious effects on the Wedge Tail Eagles and the Powerful Owls and Micro Bats that will fly very close or through the WTG.

Community Benefits- Failure

Community benefits are inconsequential considering the size and value of the project and the level of land value devaluation expected for surrounding properties. They appear as no more than a formalised attempt at bribery of local Councils.

It is clearly apparent, the funds will not be used to directly compensate adversely impacted landowners surrounding the project, whose surrounding environment, land values and lifestyles will be decimated if the project proceeds to construction in its current form. There is a distinct absence of direct unincumbered compensation proposed by Ark Energy for surrounding impacted landowners via voluntary neighbour agreements or the like, despite the brief mention of this in the EIS.

Please confirm which properties in close proximity to the Burrendong Wind Farm will receive direct benefits for the 70 plus WTGs proposed?

There is also an apparent in equitability of community benefits fund distribution for the project, given site falls over two local government areas (LGAs). Despite the fact that the majority of impacted residents and landowners in closest proximity to proposed turbines are located within the Mid-Western Regional Council LGA, money from the Community Benefits Fund for the Burrendong Wind Farm is apparently proposed to be allocated based on land area and turbine count, favouring Dubbo Regional Council. This funding distribution overlooks the disproportionate impact on Mid-Western Regional Council residents and landowners due to the close proximity of their dwellings to turbines and the fact that road access during construction will also disproportionally impact Mid-Western Regional Council residents and landowners. Whereas, Dubbo LGA residents will have a much larger separation from proposed wind turbines separated by Burrendong Dam.

Burden on Housing

Burden on Water Resources

Burden on Community Services, Health Facilities etc

Loss of community members

Economic Impact Assessment – Failure

Telecommunications – Failure

Aboriginal Heritage Assessment – Failure

Wedge Tail Eagles

Wedge Tail Eagles and the Crow are the local Wiradjuri people's Totem Animals

Koalas

Burrendong is an Aboriginal Word for Koala

Lacking Aboriginal Heritage Assessment on land proposed Road-Widening Works outside of the project site

Aboriginal Land Claim land

Cumulative Impact Assessment – Failure

Social Impact- Failure

Landowners compelled to reside within the Central West Orana Renewable Energy Zone (CWOREZ) "a modern day power station" as aptly described by EnergyCo, experience profoundly adverse cumulative social impacts.

A prime illustration of this is evident among landowners and residents in proximity to the proposed Burrendong Dam Farm. They are currently confronted with an overwhelming degree of projects surrounding them. They are contending with mounting engagement demands imposed by 100% profit driven multinational and foreign-owned corporations, in addition to those proposed by various levels of government, including but not limited to:

- Ark Energy's Burrendong Wind Farm proposal – 250m high turbines proposed to be setback only 1.2km to 2km from some dwellings, located on the top of ridgelines turbines would tower (to the tip) over 1/2km into the air above the level of dwellings located in valleys below.
  Landowners have been given only 28days in the lead up to Christmas and during Harvest season, plus a one week extension (due to an appalling failures of DPE's planning portal system that has been preventing submissions), to review thousands of pages of documentation and write in a submission. Comparatively, Ark Energy has had approximately 5 years to prepare and submit this to DPE. The timing of public exhibition appears biased in favour of Ark Energy.
- Vesta's Piambong Wind Farm proposal - Vesta's has so far ignored submissions from surrounding landowners regarding significant visual landscape features when determining their initial turbine layout, such as Cooeee Mountain (turbines are proposed to tower approximately 200m above it) and cumulative impact from the Burrendong Wind Farm proposal has not been considered.
- Uungula Wind project – currently under construction.

- Tilt Renewable Hargraves Wind Farm proposal – targeting potential host landowners to the south.
- Pheonix Pumped Hydro Dam proposal – plans to utilise water from Burrendong Dam, a reservoir where water levels dropped significantly (down to a stream in parts) during the last drought. Assessment of cumulative impacts from this project has been absent in the Burrendong Wind Farm EIS.
- Landowners approached by multinational corporations for road widening and threatened with compulsory acquisition - adding to pressures on landowners.
- EnergyCo's:
    - Push for the rollout of transmission infrastructure (detailed further below).
    - Recent public exhibition of EIS for 3GW power CWO REZ (7910 pages of documentation) to respond to within 28 days. This exhibition period included a public holiday long weekend and part of the NSW school holiday period.
    - A recent request for submissions on a proposal to double the Gigawatt power in the CWO REZ to 6 GW power with extremely limited information to comment on.
- Review of the NSW Energy Guidelines – currently on public exhibition, requiring the review of thousand of pages of documentation
- Australian Energy Infrastructure Commissioners Office
    - Multiple reviews/enquiries requesting input, including the recent 'Community Engagement Review' which is pending an outcome. Our children missed out on quality time with their parents as we were forced to review and prepare submissions during the NSW October school holidays.
    - Following up on complaints lodged with the Australian Energy Infrastructure Commissioners Office regarding Ark Energy who has accessed Burrendong SOS members land by deception which is a criminal offence.
- Mid-Western Regional Council, policies exhibited for community benefit funding from renewables etc.

The overwhelming number of projects affecting communities and landowners within the CWO REZ often occurring simultaneously and is causing prolonged periods of severe stress, anxiety, and financial hardship. People in this region, who find themselves in this situation against their will, are burdened with extensive paperwork, engagement efforts, document reviews, submissions, and countless meetings. They are forced to fight at their own expense for several years in detail, attempting to secure fundamental protections for their multigenerational properties, families and the local environment against both potential and confirmed adverse impacts.

Proponents such as Ark Energy benefit from this "engagement" overkill by suggesting that there has been minimal objection to their projects and limited attendance at their tickbox ~~engagement~~ marketing / gaslighting information sessions, which is far from the truth of the situation.

Communities and landowners are being buried in paperwork. Communities and landowners in the CWO REZ and surrounding the Burrendong Wind Farm proposal want their lives back, to make a living, raise their children or retire peacefully and contribute positively to their communities, instead of being devastated by the entrenched inequity of this energy transition.

Indicative projects currently under assessment or construction in the CWO REZ

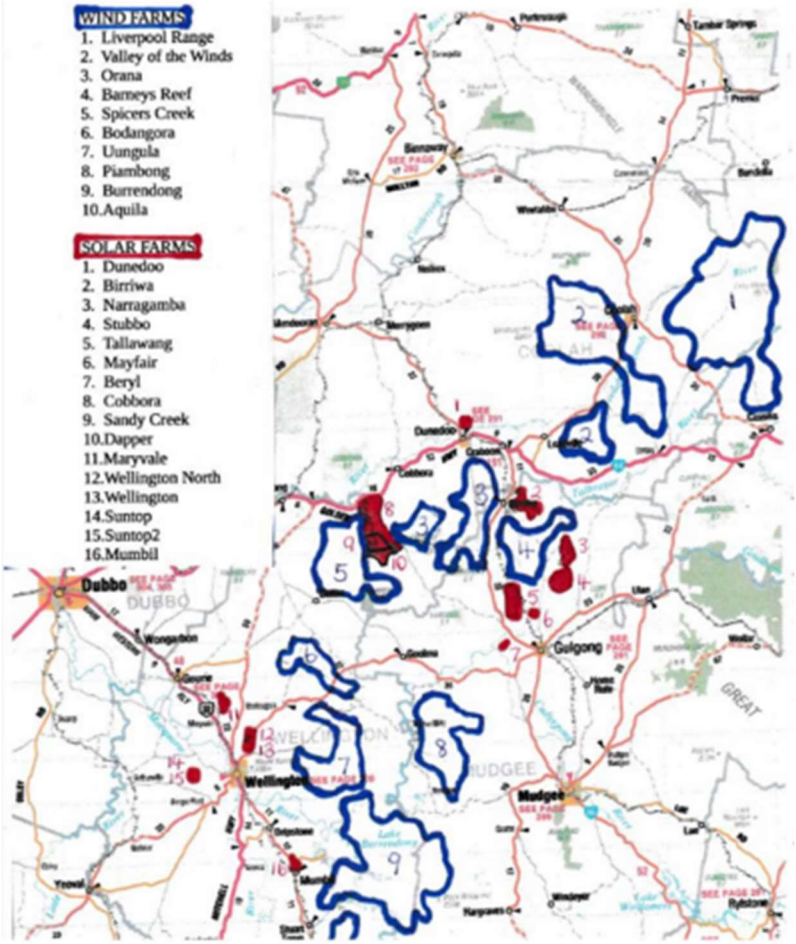


Figure 16: *Indicative projects currently under assessment or construction in the CWO REZ. (Note: Missing the additional: Tilt Renewables Hargraves Wind Farm and Pheonix Hydro Burrendong)*

Water

Traffic

What about the cumulative traffic impact of all of these Wind Factories and the Phoenix Hydro Burrendong power station planned to be constructed simultaneously. This cumulative impact will impact immediately surrounding landowner and residents and will also extend beyond the site along the access route all the way to the Port of Newcastle. How will this cumulative impact be managed for the Central West Orana Renewable Energy Zone?

Employment

Surrounding Wind Farms

EIS P450 – fails consider cumulative impacts from:

- Tilt Renewables – Hargraves Wind Farm Proposal
- Phoenix Hydro - Burrendong
- Piambong Wind Farm proposal

Biodiversity

Siting wind turbines on high biodiverse, old growth landscape is appalling. Habitat now more than ever must be conserved. We should conserve what's left of our remnant, ecologically thriving habitat.

- The EPBC legislation does not factor in the cumulative impacts of habitat destruction for so many renewable developments.
- Australia has the worst mammal extinction rate of any country in the world. We will drive more species to extinction with poorly considered wind farm siting.
- Raptors such as the Wedge Tail Eagle are particularly vulnerable to turbine strike. Even if only a few breeding adults are killed by wind turbines a year, that is enough to impact a regional population. Raptors are slow-breeding and healthy adults are critical to a population. It is highly likely a high concentration of turbines proposed for the Central West Orana Renewable Energy Zone, in which the Burrendong Wind Farm is proposed, will contribute to the regional extinction of the Wedge Tail Eagle.
- In VIC, survey data suggests thousands of bats die annually due to wind farms. One expert estimates 12,000 to 40,000 bats are killed from wind farms per year. Our area is home to many species of bat and they won't fare well with so many wind farms and no mitigation measures in place.
- Once old growth habitat within C3 Environmental Management Zones etc are cleared for big wind developments, weeds are introduced. Feral pests gain easy access to the site with newly created haulage roads.
- Wildlife can exhibit unusual behaviour around cleared margins of formerly intact habitat, known as the "edge-effect". This edge-effect can impact breeding patterns and other wildlife behaviour in unforeseen ways. Connectivity shrinks and the health of individual biomes is impacted.
- The infrasound of wind turbines may mask mating calls of Koalas –no research has been conducted on this potential impact.
- The fragmentation of habitat for wind farm haulage roads exposes smaller species to increased aerial predation, impacting the ecological health of the landscape.
- The siting of a wind farm is critical. They should not be sited on high quality environmentally significant habitat that is zoned for environmental management as this poses too great a risk to biodiversity. **The precautionary principle must apply.**
- The scale of habitat clearance in the CWO REZ for renewables is alarming. It renders many other conservation issues trivial.

Offsets are a Sham

- Habitat isn't interchangeable, nor can it be offset. All habitat harbours life.
- Wildlife relocation doesn't work. Once wildlife is relocated it usually dies as other wildlife already live inhabits that area.
- Denning trees are critically endangered. Tree hollows provide homes for many species including Greater Gliders. They take over 100 years to grow. Destroying denning trees for wind turbines makes no sense.
- The proponent claims the land and waterways will be rehabilitated. We find this claim dubious. It is likely to cost millions of dollars to revegetate the steep and tricky terrain. The Proponent will be long gone after on-selling the development approval, and there will be no money securely set aside upfront for future rehabilitation.
- Once old-growth habitat is cleared, it will never return. Weeds will be introduced, wildlife will be displaced and likely killed.

Decommissioning Assurance - Failure

To improve social licence our community and surrounding landowners, there must be a watertight guarantee that wind developments will be decommissioned and removed from land at the end of their life. Written and verbal statements that decommissioning will occur does not cut it.

The current guidelines leave the fate of decommissioning in the hands of turbine hosts (rural landowners) and their ability to understand and negotiate their future decommissioning via private contracts with wind farm proponents. This is grossly inadequate and has resulted in instances where wind developments and developers (like Ark Energy) change hands multiple times and go bankrupt, leaving hosting landowners to foot the bill for decommissioning - which ultimately means turbines are left to rust on-site with associated safety, bushfire and contamination risks and ongoing impacts for surrounding landowners and communities.

As it stands now, the cost of decommissioning 100m to 150m high turbines is approximately $600,000 to $700,000 per turbine. The proposed increases in turbine heights to 250m up to 300m will increase decommissioning costs dramatically in addition to inflation over a 20 to 25yr period.

According to the Australian Energy Infrastructure Commissioner (AEIC) as extracted from the Commissioner's 2021 Annual Report:

> *"To put these costs into perspective, the total fees earned for hosting a turbine for 25 years could be in the range of $250,000 - $750,000 [per turbine] (depending, typically, on the turbine capacity and when the wind farm commenced operations). It is therefore possible that the costs to decommission a turbine could be equal to or greater than the total income generated for the landholder over the 25-year lease period."*

Accordingly, host landowners, surrounding landowners and communities require security, oversight and ongoing evidence that the Burrendong Wind Farms project owners are legally required to and have the capacity to fund the decommissioning of their wind projects, and that such funds are properly set aside securely upfront and ongoing for that purpose. Examples that should be considered include upfront bank guarantees, a sinking fund, a trust fund or a security bond deposit - held and managed securely by Government. We request that a legal framework be set up and made publicly available to ensure this occurs.

AEIC as extracted from the Commissioner's 2021 Annual Report notes that:

> *"Some proponents are offering to deposit decommission funding into a trust fund, but typically not commencing until the later years of the project life, such as year 15 or even year 20. There are a number of risks with the timing of such an approach and would require the project owner to source significant funding in the declining years of the asset to achieve the funding requirements. It would be much more acceptable, and at far less risk to the landholder [surrounding landowners and the community], for the developer to commence funding the decommissioning trust fund from commencement of the asset's operations."*

To ensure the decommissioning of turbines and associated infrastructure and removal of all contaminants at end of life of a wind project, we require that there should be at least 1 million dollars per turbine securely set aside upfront based on today's costings, before a wind project commences construction. And regular ongoing payments should be made into a secure account to account for inflation and cover all identified decommissioning and recycling costs.

AEIC as extracted from the Commissioner's 2021 Annual Report notes that:

"The Offshore Electricity Infrastructure framework requires licence holders to decommission all infrastructure and address environmental remediation at the end of a project's life. Developers are also required to provide financial security that covers the cost of decommissioning infrastructure to ensure these costs are not borne by the Australian Government."

This same level of decommissioning security and oversight must be extended to all onshore wind farms including the Burrendong Wind Farm proposal, to protect host landowners, surrounding landowners and rural communities.

Wind farm decommissioning agreements should form part of the public consultation/ engagement process and be made publicly available. Burrendong SOS has not been able to site or review the wind farm decommissioning agreement for the Burrendong Wind Farm proposal.

The decommissioning will also impact roadside trees so more trees will be required to be removed so the site can be removed. This has not been considered anywhere.

There is no discussion or mitigation measures for animal impacts and what to do if this occurs. This needs to be addressed in this section.

Land Value Depreciation Impacts – Failure

Lifestyle properties

Health and Hazards Assessment – Failure

The subject of public health is of major concern for people in the area. Only one small paragraph discusses this issue and is very dismissive of the public health issues. This needs to be addressed with proper scientific papers explaining all facets of public health around Wind Farms.

Burrendong SOS members to not consent to adverse health impacts resultant from WTGs and associated infrastructure.

The following health and hazard have failed to be adequately addressed by the EIS:

Air Safety

Apparently twelve (12) WTGs will impact PANS-OPS for Mudgee aerodrome. They state that approach heights to Mudgee aerodrome be raised from 3,900ft to 4500ft to ensure safety. What about removing the twelve (12) WTG's then there will be no issue for safety height clearance for airplanes.

At this stage we are not sure which twelve (12) WTG are affected by this. Will it be WTG No 49 – 61? This information must be provided.

Hazardous Materials

As a condition of consent, we require that a list of hazardous materials (material safety data sheet) for all development on the wind farm be made publicly available, so the neighbouring landowners are aware of any toxic materials that may blow onto their farming land and into their drinking water tanks in the event of a turbine fire or similar incident.

Blade Throw

We are concerned that adjoining landowners and their properties could be placed in danger by blade throw, with some turbines proposed only a couple of hundred metres from property boundaries.

Bushfire

Landscaping around dwellings as a visual impact mitigation measure

Non-associated dwellings surrounding the project site are located on 'Bush Fire Prone Land' with limited and difficult single access evacuation routes, many on dirt roads. Asset protection zones are required around dwellings so that residents have an opportunity to shelter in place in the event of a bushfire.

Any recommendation for landscaping around dwellings as a visual impact mitigation measure, must be accompanied by a Bushfire Assessment Report, specifying required Asset Protection Zones (APZs) to ensure maximum protection of human life and assets in the event of a bushfire, in accordance with the NSW Rural Fires Act. The LVIA should not recommend vegetation planning within identified APZs.

Vegetation screen planting on surrounding land is part of the Burrendong Wind Farm proposal, yet this aspect of the proposed development has not been referred to the NSW RFS for assessment purposes. This must be directly referred to NSW RFS for consideration and comment.

Aerial Water Bombing Access Concerns

Burrendong SOS members located to the east and north-east and south-west of the proposal are concerned that if constructed, the Burrendong Wind Farm will significantly hamper aerial firefighting capabilities of the RFS to protect their properties and homes in the event of the bushfire.

The Burrendong Wind Farm is proposed to stand between the key water source for aerial water bombing (Burrendong Dam) and their properties. Will aerial water bombers be able to fly safely and directly from the Burrendong Dam water collection point, over the Burrendong Wind Farm to water bomb / protect houses to the north-east, east and south-east of the wind farm?

Noting, aerial water bombing is the only feasible firefighting option to protect land and lives around the project site. It would be unsafe for firefighting trucks to access/escape most areas in the event of a major bushfire in the area.

Increase in Insurance

Will non-associated landowners' property insurances increase with regard to bushfire as a result of this proposal?

Public Record Keeping

We require a condition of consent that requires the Burrendong Wind Farm to maintain publicly available records of all fire events that occur on the site.

Bisphenol A (BPA)

Despite the issue raised as a concern by community, the EIS fails to address the fact that BPA is a highly toxic synthetic organic compound used in the epoxy resins of turbine blades. Epoxy resins contain 30-40% BPA and turbine blades are the largest global consumer of epoxy resins.

BPA is an endocrine disrupter that has been linked to about 80 diseases including cancers and reproductive disorders. It can be lethal for young children. In 2012, the World Health Organization warned about the potentially carcinogenic properties of endocrine disrupters and concluded that they pose a global threat to public health. The European Food Safety Authority has massively reduced by 1,000 times the dietary intake of BPA to one hundred millionth of a gram per kilogram of body weight per day. All this is public record information.

The leading edges of turbine blades shed fine BPA dust as blade edges erode over time. According to Senator Gerard Rennick – Federal QLD, each blade sheds a minimum of 0.2 to 2.5 grams of BPA in dust per

year. This dust is spread wide and far by wind. If one gram of BPA gets into dam waters (such as Burrendong Dam), 10 million litres of water are rendered unusable. Over the life of a turbine, this equates to pollution of half a trillion litres of water per turbine. BPA dust from turbines will leach into soils, waterways and blow into the drinking water tanks of surrounding landowners. This is a toxic timebomb. Our clients do not consent BPA toxicity resulting from approval of the Burrendong Wind Farm.

If this project is approved, a condition of consent **must require** that turbine blades incorporating epoxy resins are BPA free. Ongoing toxicity monitoring of neighbouring landowners water tanks for BPA and river systems and the Burrendong Dam must also be required.

Use of BPA in the epoxy resins of turbine blades would also not comply with the objectives of the C3 Environmental Management Zone under MWRLEP, upon which zone many turbines are proposed, that is:

- *To manage development within the water supply catchment lands of Windamere and Burrendong Dams, to conserve and enhance the district's water resources.*

Without putting too fine point on it, there are significant impacts that the DPE appears to have failed to recognise as regards this scheme.

Nuisance Noise

Refer to relevant points under section 'Noise and Vibration Impact Assessment (NVIA) – Failure'

Naturally Occurring Asbestos

EMF

Waste Management – Failure

What consultation has the proponent had with waste management facilities?

We are aware that Mudgee Waste Facility will not accept turbine parts. Dumping of turbine parts have already been refused and turned away by Mudgee Waste Facility.

Where and how will turbines and turbine parts be disposed of?

What transport routes will be taken to dispose of turbine parts that require heavy vehicle access?

No consideration has been given to the waste from trees being removed.

Wind Resource Map- Failure

The Bulletin, Pg 7 'Preliminary Environmental Assessment (pre-lodgement); requires:

"At the scoping and design phase, the proponent must undertake a preliminary environmental assessment that considers the landscape in which a proposed wind energy project will be located. The analysis must include:

- *…….*
- *production of a map detailing key landscape features (informed by community consultation and any groundtruthing undertaken), the preliminary wind turbine layout, the location of dwellings and key public viewpoints and an overlay of the wind resource; and"*

This map with required overlays was not provided in the Preliminary Environmental Assessment (pre-lodgement) phase, in non-compliance with The Bulletin requirements.

I would suggest that many wind turbines, including Turbine Nos. 49 to 61 are not located on areas of land with a high enough wind resource to warrant the destruction of the natural scenic landscape.

Telecommunications Stakeholder Engagement- Failure

Landowners in Worlds End and Yarrabin rely on Starlink satellite telecommunication services.

Landowners do not get Telstra, Optus, Vodafone or NBN Co. telecommunications in the area!

The Proponent has not consulted with Starlink to determine whether the quality of telecommunication services will be reduced by the proposal for non-associated landowners in proximity to the project site.

The EIS fails in this regard.

We currently have perfect satellite internet and telephone reception. What measures and protections are in place to ensure these essential services are not interrupted? What happens if reception becomes poor after construction, what measures will the wind farm company be required to take to rectify reception issues immediately?

What about radio reception? Landowners rely on this for bush fire safety updates.

Removing the Ban on Nuclear

Nuclear is Co2 free!

Nuclear will have a far smaller land footprint compared to a never-ending sprawl of wind turbines, solar panels, batteries and pumped hydro dams, access roads and associated transmission lines and mining etc covering our bush, oceans and agricultural land, destroying our agriculture, tourism, local ecosystems and communities.

We are never going to need less electricity, demand will continue to increase and under the current highly subsidised renewable energy directive, renewable sprawl will continue to cover and destroy the Australian landscapes, ecosystems and communities.

The amount of landowners and communities affected by the renewable sprawl directive is extensive, and opposition and civil unrest is exponentially increasing with it. People's families, livelihoods, health and lifestyles are under direct threat across the board.

Nuclear located within existing decommissioned coal fire power stations, utilising existing transmission line infrastructure would significantly reduce the level of impacted communities opposing renewable sprawl that is growing across Australia.

Nuclear would significantly reduce the number of unique ecosystems and the amount of agricultural land destroyed by renewable sprawl. The cost of nuclear would also be more equitably covered by all Australians, instead unfairly burdening rural landowners land with the cost of this transition.

We must remove the ban on Nuclear immediately – it must be considered as part of the energy mix.

We must remove the Australian Government's commitment to increase the amount of energy produced from renewable energy sources to 82% across the National Electricity Markey by 2030. This is driven by ideology and will devastate our economy, ecosystems and communities.

Public Interest

- Agricultural production – Jobs will be pilfered from agricultural production into renewables construction, ultimately impacting food supply. There is already and shortage of workforce for agriculture.
- BPA free Burrendong Dam and Meroo River
- Rural Tourism and associated Employment Impacts – The reason people visit the area (for quite peace and tranquillity, natural environment, dark sky and recreation) will be lost.
- Burrendong Dam Recreation
- Public Health
- Housing – Pushing multigenerational families / community members out of their homes during a housing crisis.
- Not enough Doctors and Nurses to support 9000+ working population growth in the REZ
- Water Supply is definitely a public interest. Just one workers camp of 2000 people will use more than the town of Gulgong's current water supply. That's not even including all the water required for construction, concrete, dust suppression, fire fighting of the huge number of projects that are all planned to commence simultaneously in a drought-prone area. We don't have the water required.
- The right to a good nights sleep – Bald Hills Court Case
- Critically endangered Koala population – must be protected at all costs.
- The focus on biodiversity has been lost in the rush to renewables. Climate change is but one contributor amongst many that negatively impact the natural world. We should never separate biodiversity from climate action. A healthy natural world means a healthy climate.
- The scale of habitat clearance in the CWO REZ for renewables is alarming. It renders many other conservation issues trivial.

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