St Patricks Plains Wind Farm

St Patricks Plains Wind Farm Information Centre in Bothwell

Supplement to the EIS

The Supplement report to the Environmental Impact Statement (EIS) has been completed and is now available on the Environment Protection Authority Tasmania's (EPA) website.

The Supplement responds to comments on the EIS made during its public exhibition period, including by government agencies, the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW), and members of the public. To access the St Patricks Plains Wind Farm page in the EPA website visit epa.tas.gov.au or scan the QR code right.

Scan QR code to access the project page in the EPA website

For the convenience of local community members printed copies of the Supplement are available for on-site viewing in Bothwell at: Central Highlands Council, 19 Alexander Street (open Mon-Fri, 8am – 5pm); and the St Patricks Plains Wind Farm Information Centre, 16A Patrick Street (open Fri,10am – 1pm).

Next steps

The EPA will now complete its assessment. If the EPA determines the project to be acceptable it will provide approval conditions to Central Highlands Council. Council has appointed an independent planning consultant to assess the application on its behalf. Council will consider the recommendation of their independent planning consultant and make their determination on the Development Application (DA) against the provisions of the planning scheme.

If council approves the project, it must include any conditions set by the EPA, and the project will then be subject to approval by the Commonwealth government under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The project team is working towards all required approvals being in place by Q4 2024 with construction anticipated to commence about 9 –12 months later.

Matters raised in public submissions

Thank you to everyone who took the time to consider the proposal and make a submission during public exhibition of the project's EIS. A number of matters were raised, including many that were appropriate to address in the Supplement report and some others. Matters raised included potential impacts to eagles and the turbine curtailment system called Identiflight, issues related to shadow flicker/blade glint, concerns over property values, heritage assessments and decommissioning. Brief responses to these issues are provided in this newsletter.

Location

The project area for the St Patricks Plains Wind Farm is about 10 km south-east of Miena and 25 km north of Bothwell in the Central Highlands area of Tasmania.

Key project information:

- Up to 47 wind turbines.
- Wind turbine tip height of 231m.
- Up to 300 megawatts of clean, renewable energy.
- Up to 200 jobs during construction.
- Up to 20 full-time jobs during operation.
- Construction period of 24 months.
- Community Benefit Fund for the life of the wind farm.

Eagles and IdentiFlight

IdentiFlight is a bird detection system that uses cameras and software to identify eagles. The curtailment technology minimises risk of bird collisions by stopping the turbine rotor when an eagle flies within a safety clearance distance of the wind turbine.

The Cattle Hill Wind Farm in Tasmania was commissioned in 2020 and in line with consent conditions, IdentiFlight technology was installed on the project site.

Since commissioning, Cattle Hill Wind Farm has recorded a total of eight eagle collisions, which is fewer than predicted without the technology. Available evidence indicates that all (but one) of the eagle fatalities occurred in parts of the site where canopy clearance was not able to be undertaken and therefore the IdentiFlight units did not have sufficient visibility to the Wind Turbine Generator (WTG).

The St Patricks Plains Wind Farm proposes the use of IdentiFlight to mitigate eagle collision risk. The project will apply available learnings from Cattle Hill Wind Farm (and other sites worldwide) to ensure optimal efficacy.

The most critical learning being design optimisation to provide full coverage of all turbines to ensure collision risks are minimised. This includes addressing the risk of visibility into the turbine rotor safety clearance zone being blocked due to vegetation.

There is an increasing track record of the effectiveness of the IdentiFlight system across the world as more units are deployed each year to protect threatened raptors.

Noise

Technological advances have reduced operational wind turbine noise and current models are much quieter than older models.

Noise output from a wind farm can be predicted using acoustic modelling, and a technical noise assessment for St Patricks Plains Wind Farm was undertaken by independent acoustic specialists and included in the EIS.

The noise assessment was done in accordance with relevant legislation, policy and standards, and involved applying the noise level from the candidate wind turbine at all proposed wind turbine locations, and using predictive modelling to determine the noise output associated with operation of the full wind farm.

As the wind turbine to be installed on site is not yet finalised a candidate wind turbine was selected for the noise assessment – in this case the Vestas V162 6.2MW was selected.

The purpose of a noise standard is to ensure the limit is appropriate for the protection of sleep and amenity of residents. The noise limit at any non-involved residence is 35 dB or the background noise plus 5 dB – whichever is greater. The diagram below shows the decibel levels of familiar sounds for reference.

The noise predictions for the St Patricks Plains Wind Farm are based on conservative modelling, which assumes the highest sound power levels of the candidate wind turbine. These predictions indicate that the noise levels are below the criteria set by the EPA.

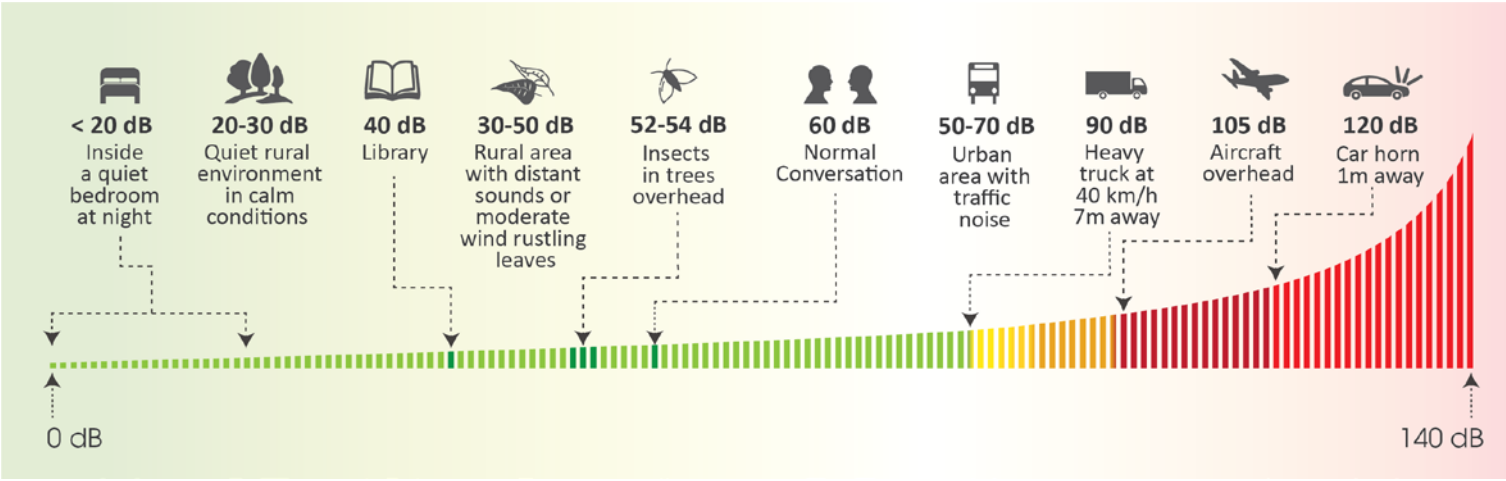
Based on the technical noise assessment conducted as part of the EIS, there are no indications that layout changes or noise mitigation strategies are warranted at this time.

A post-construction noise assessment will be undertaken.

In the event of non-compliance identified at a non-involved receiver, mitigation will be implemented.

Established methods exist for addressing operational noise issues. These may include operating selected turbines in noise-reduced modes under specific conditions to ensure compliance.

Appendix H of the Supplement includes results from a modelled hypothetical scenario demonstrating noise reduction achieved by operating a group of turbines in a noise-reduced mode. This approach showcases how substantial noise impact reduction could be achieved at relevant receivers post-construction if such noise management were required.



Shadow flicker

Shadow flicker occurs when the rotating blades of a wind turbine, positioned to the east or west of a dwelling, cast a moving or flickering shadow on the dwelling during sunrise or sunset, respectively.

An independent assessment of shadow flicker across the site was conducted. The assessment revealed the potential for one neighbouring residence to receive more shadow flicker hours than the prescribed limit. The assessment is conservative, suggesting a low probability of exceeding the limit.

Ark Energy has committed to work with the landowner to address any potential issues, either by ensuring there is no exceedance of the limit or by implementing measures such as planting vegetation or installing screening to mitigate any impact on affected windows.

Property values

Property prices are influenced by many factors, however there is no reliable evidence that proximity to a wind farm or the visibility of wind turbines has a measurable negative impact on land values and property sale prices.

The wind farm has contributed to a rise in local housing demand, primarily driven by the potential demand from the construction workforce. As the project progresses, the commissioning of the wind farm will create a need for a limited number of operations and maintenance staff and workers.

End of operation

Wind turbines have an operational life of approximately 30 years. Options at the end of this period include extending the life of the wind farm via refurbishment, repowering the site with new infrastructure or decommissioning. If the operator decides not to extend or refurbish the wind farm it will be decommissioned within 12-18 months of ceasing operation.

Aboriginal heritage assessment

Ark Energy acknowledges the continuing connection that Aboriginal and Torres Strait Islander Peoples have to their land and First Nations people are important project stakeholders.

An assessment has been undertaken to determine the Aboriginal cultural values of the site and provide management recommendations. The Aboriginal Heritage assessment was not included in the documents for public exhibition as these documents are assessed by the Aboriginal Heritage Council under the Aboriginal Heritage Act 1975.

Further survey work is required on the site prior to any ground disturbance and if required following detailed design. Ark Energy has committed to ensuring the remaining survey work is completed and continues to liaise with Aboriginal Heritage Tasmania on this matter.

Ark Energy has legal agreements in place with the landowners on site to ensure that decommissioning and rehabilitation of the project is completed as agreed with the landowners. A Decommissioning and Rehabilitation Plan will be provided to the Director, EPA Tasmania for approval in line with consent conditions.

The decommissioning process will involve the removal of all above ground infrastructure including wind turbines, electrical infrastructure and buried cables, and turbine footings up to 500mm below ground level. Exceptions would include infrastructure which landowners wish to retain, (e.g., landowners who wish to keep access tracks in place).

Wind turbines are predominantly made of recyclable materials and approximately 85-94% of today's wind turbines are recyclable. Research and developments in technology continue to advance recyclability of wind turbine components. Most – if not all – of the materials would be reused, repurposed, recycled and recovered.

Neighbour participation program

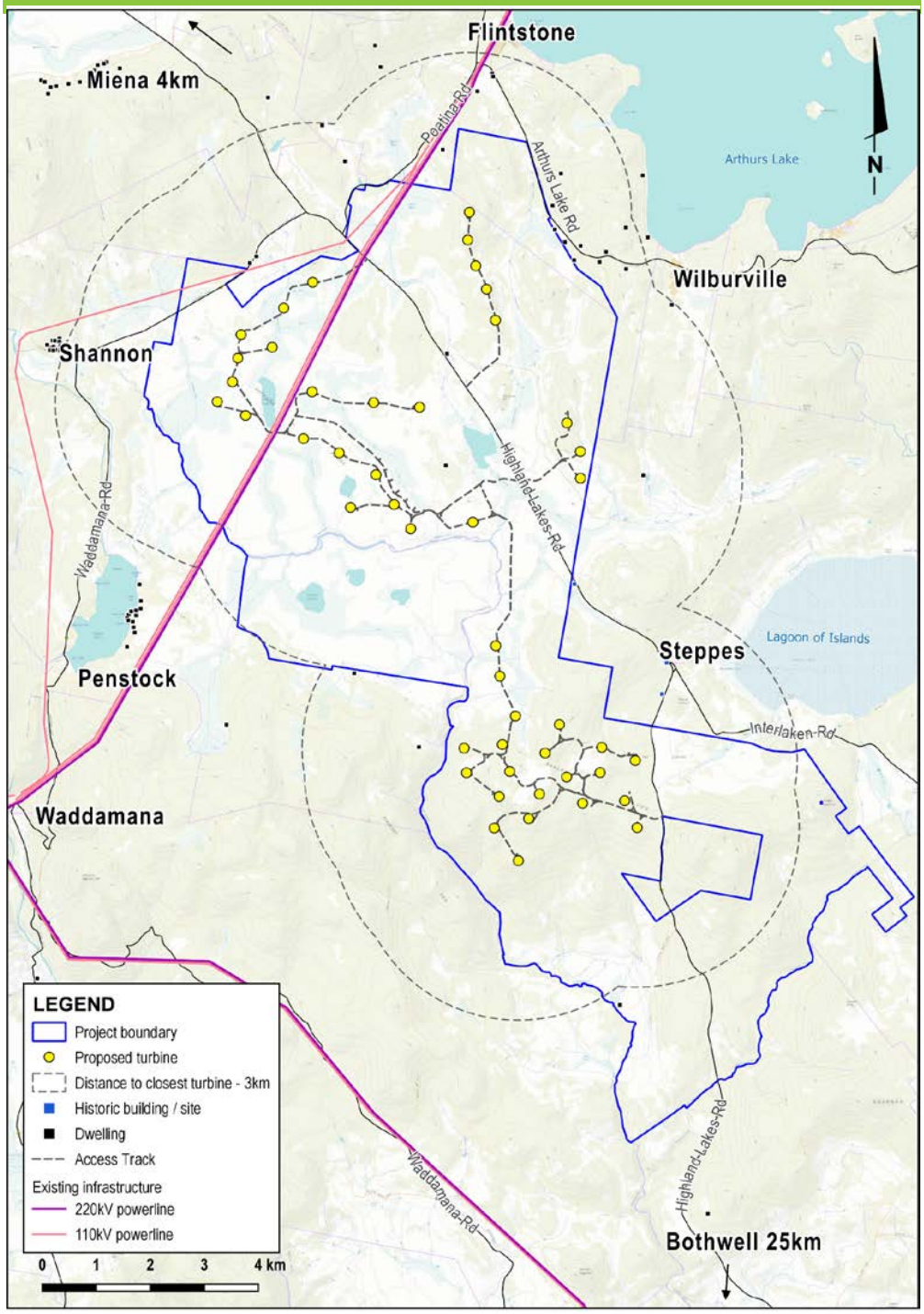
A neighbour participation program is available to residents who live within 3 km of a proposed wind turbine location. Many neighbours are now part of this participation program. If you believe you are eligible to participate in this program and have not yet spoken to the project team, please contact us via the details overleaf. Please note, all wind turbine locations are at least 3 km from dwellings in the settlements of Wilburville, Flintstone, Shannon and Penstock Lagoon.

Planning & assessment

The Development Application will be determined by Central Highlands Council and the Environmental Impact Statement & Supplement will be assessed by the Environment Protection Authority Tasmania

1. Site selection and preliminary investigations ✓
2. Referral to the Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) for review under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
   * Determined a Controlled Action with assessment under bilateral agreement (Ref 2019/8497). ✓
3. Notice of Intent lodged with the EPA ✓
4. Project Specific Guidelines for the EIS issued by the EPA ✓
5. Studies, assessments, site design ✓
6. Preparing EIS for lodgment ✓
7. Development application (DA) and EIS submitted to Central Highlands Council ✓
8. EIS referred by Council to the EPA ✓
9. EIS on exhibition for public comment ✓
10. Responses to submissions and EPA request for additional information. ✓
11. Assessment by the EPA — **WE ARE HERE**
12. If approved, EPA conditions provided to Council
13. Assessment by Council
14. Determination by Council
15. Determination by DCCEEW

St Patricks Plains Wind Farm site map – 47 wind turbines



Questions

Thank you to all those who have engaged with us on this project to date.

Questions and feedback are welcome at any time and can be sent directly to the project team via the contact details below.

More information

Visit - St Patricks Plains Wind Farm Information Centre, 16a Patrick Street, Bothwell, 7030. Open 10am - 1pm Fridays.

Phone - 1800 731 296.

Email - info@stpatricksplainswindfarm.com.au

Register for updates - arkenergy.com.au/mailing-list-details

Website - stpatricksplainswindfarm.com.au / scan QR code

Scan QR code to visit the project website

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