

# Valley of the Winds (SSD-10461)

Independent Planning Commission

Applicant Meeting

2<sup>nd</sup> April 2025

# Acknowledgement of Country

ACEN Australia acknowledges the Gomeri people and the Wiradjuri people who are the Traditional Custodians of the Land on which our Valley of the Winds project is proposed to be located.

We recognise the resilience and knowledge of the Traditional Custodians of this Nation.

We pay our respects to elders, past and present, the many Aboriginal people that did not make their elder status and to those that continue to care for Country.

# Agenda

- Applicant Introductions
- Overview of Application
- Key Issues
  - Visual impact
  - Traffic & transport
  - Biodiversity
  - Aviation safety
  - Construction
    - Waste & water management
    - Water supply
  - Workforce accommodation
  - Consultation
  - Decommissioning
  - Socio-economic



# Applicant Introductions

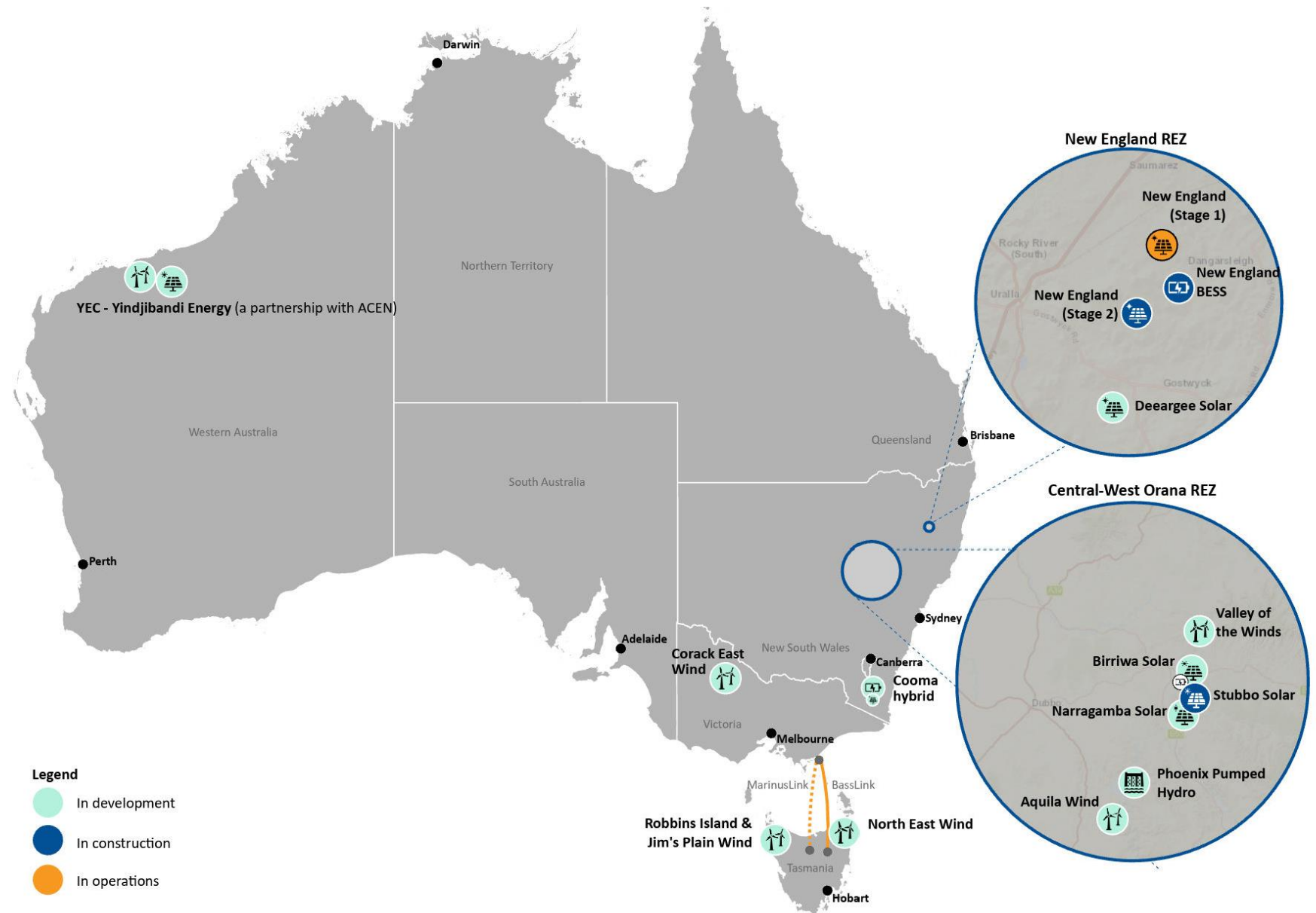
# Applicant Representatives

- **Killian Wentrup**      Head of Development
- **Megan Richardson**      NSW Wind Team Lead
- **Liam Parnell**      Project Developer
- **Michael Yeo**      Construction Project Manager



# ACEN Australia

- ACEN Australia is a wholly owned subsidiary of ACEN (PSE: ACEN), the listed energy platform of the Ayala group
- ACEN currently has ~7 GW of attributable renewable energy capacity spanning operational, under-construction, and committed projects
- ACEN's current target is to reach 20 GW of renewables capacity by 2030
- In Australia ACEN currently has 1.2 GW capacity of large-scale renewable energy generation and storage projects in construction and operations, and more than 13 GW capacity in the development pipeline



# Overview of Application



# Project Context

- ✓ Helps replace NSW's aging coal plants - ca. 8.2 GW closing by mid 2030s (source: AEMO)
  - Eraring (2.9GW Aug 2027 - 2031), Vales Point (1.3GW, 2029), Bayswater (2.6GW, 2035, Mt Piper (1.4GW, 2038)
- ✓ Complementary generation profile to daytime solar generation; NSW wind profile more effectively helps meet evening peak demand
- ✓ Announced as a successful project in the Capacity Investment Scheme (CIS) Federal Government tender 1 in Dec 2024
- ✓ Selected in the NSW EnergyCorp. CWO REZ Access Rights process
- ✓ Helps meet NSW climate change target 90% cut in emissions; Elec. Infrastructure Roadmap target of 12GW of new generation by 2030
- ✓ Helps meet Federal Govt target, 82% RE by 2030; contributes to 32GW of new capacity

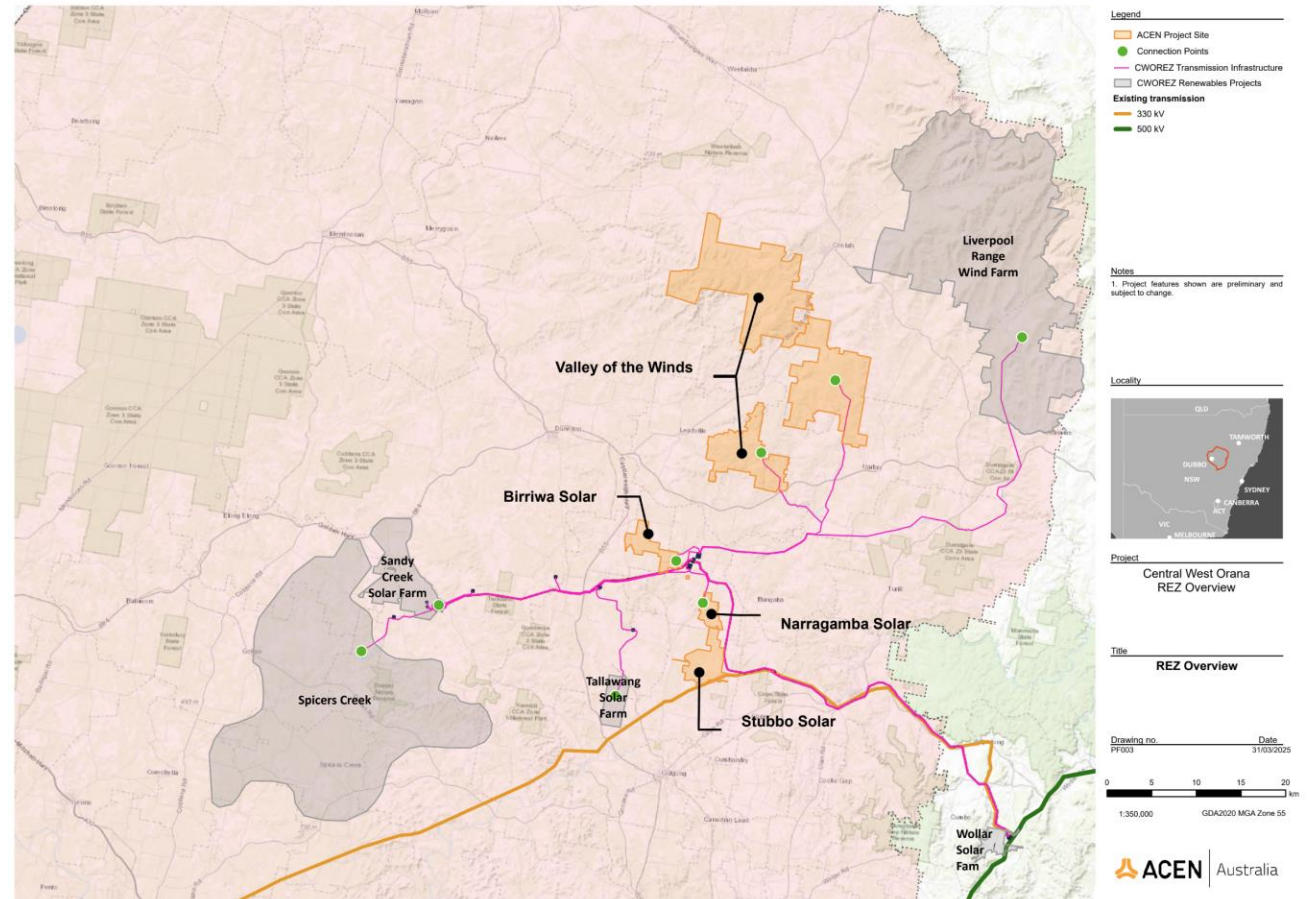
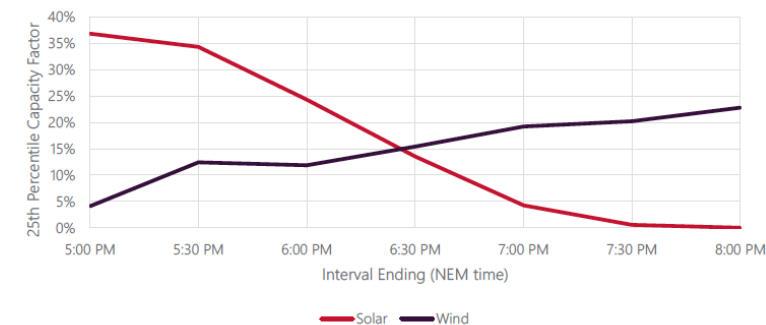


Figure 5 25th percentile capacity factors for top 10 summer days

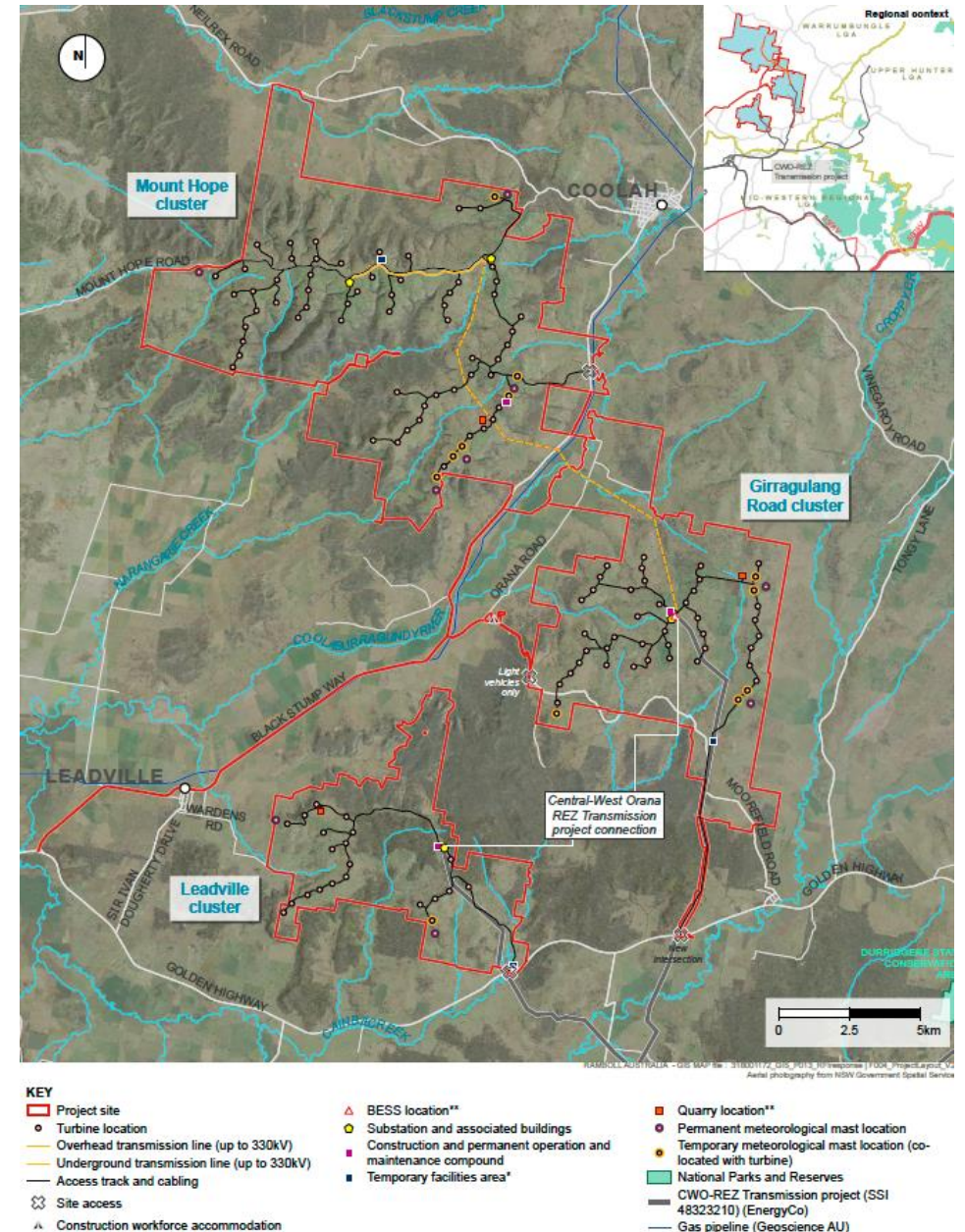


Source: NSW Govt, AEMO ESTMR 2023

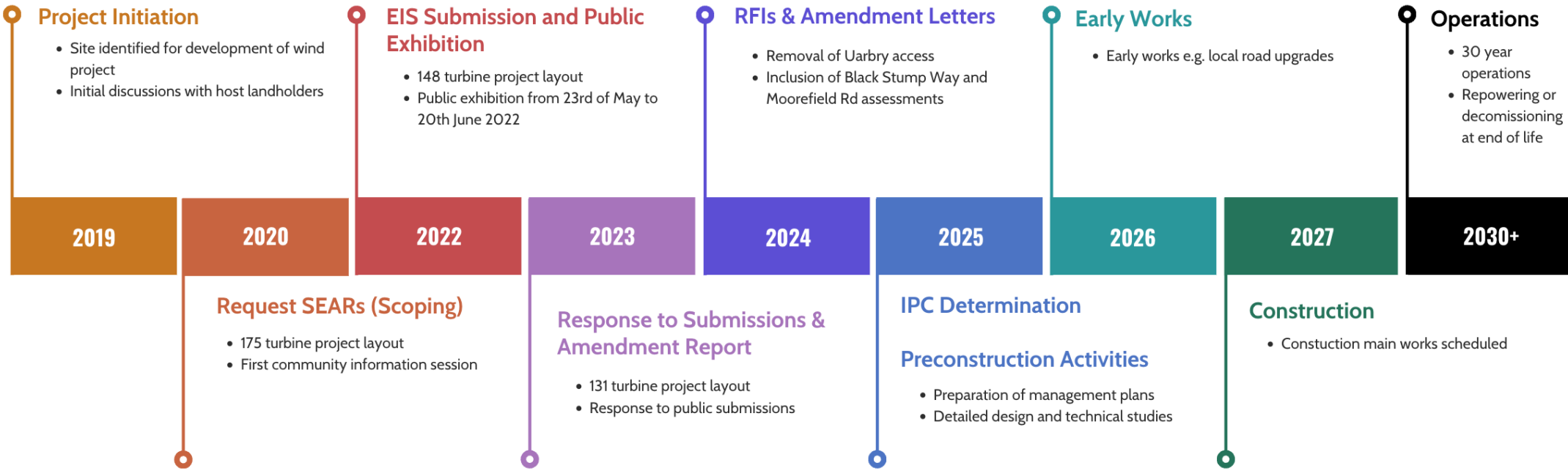


# Project Overview

- **Location:** near Leadville, Coolah and Uarby in Warrumbungle Shire Council
- **Size:** up to 131 wind turbines with installed capacity of ~943 MW and 320 MW/ 640 MWh BESS
- **Maximum turbine tip height:** up to 250m
- **Connection:** Central West Orana Renewable Energy Zone (CWO-REZ) Transmission Network via two dedicated 330kV transmission lines to Merotherie Hub
- **Landowners:** 20 host landowners and 26 associated neighbours
- **Existing land use:** livestock grazing & cropping
- **Main site entrances:** 2 off the Golden Highway, 1 off the Black Stump Way
- **Ancillary Infrastructure:** Temporary Workforce Accommodation Facility, 3 x construction quarries, ~116km of access roads, 3 x construction compounds, 3 x concrete batch plants, 3 x materials storage and laydown, 4 substations, ~17.5km of overhead and ~110.5km of underground transmission line/reticulation & comms, O&M facility/s, 9 permanent and 12 temporary meteorological masts



# Project Schedule



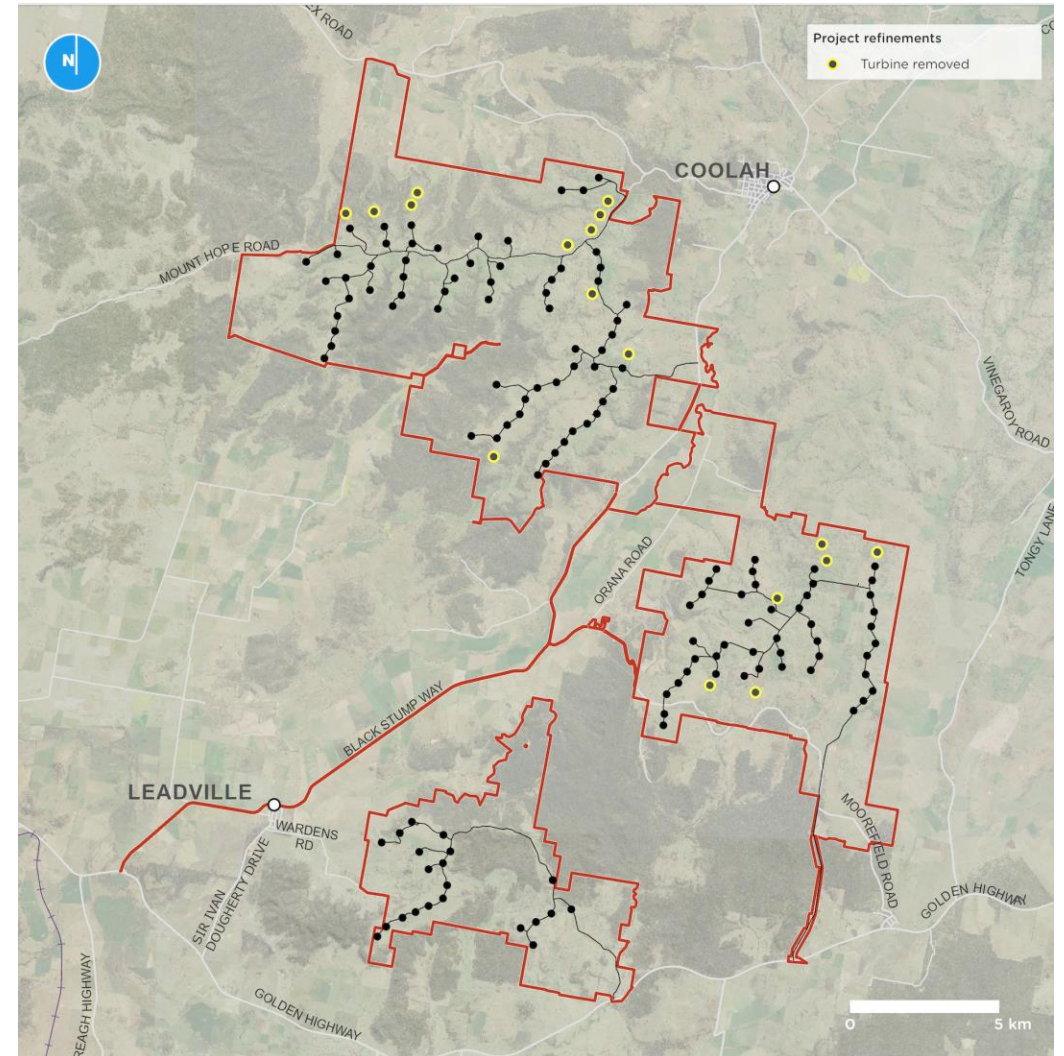
Consultation and engagement with local community and key stakeholders



# Key project design changes

Since submission of the EIS, project design changes made in response to community feedback, environmental constraints and project design optimisation have included:

- ✓ Removal of 17 wind turbines & associated access tracks
- ✓ Removal of 4, & relocation of 7, met masts
- ✓ Inclusion of additional substation in the Mount Hope cluster
- ✓ Removal of 330kV overhead transmission line (now being delivered by EnergyCo/ ACE-REZ as part of the CWO-REZ Transmission project)
- ✓ Amendments to access routes:
  - ✓ Removal of access to the Girragulang cluster via Uarbry, with an alternative access ~3km west
  - ✓ Removal of light vehicle access from Coolah to the Mount Hope cluster via Neilrex Road
  - ✓ Removal of light vehicle access from Leadville to the Leadville cluster via the Leadville stock route and Warden's Rd
- ✓ Detailed assessment of upgrade works to local roads (Black Stump Way and Moorefield Rd)
- ✓ Revision of project boundary to include Black Stump Way and Moorefield Rd and to exclude unutilised land

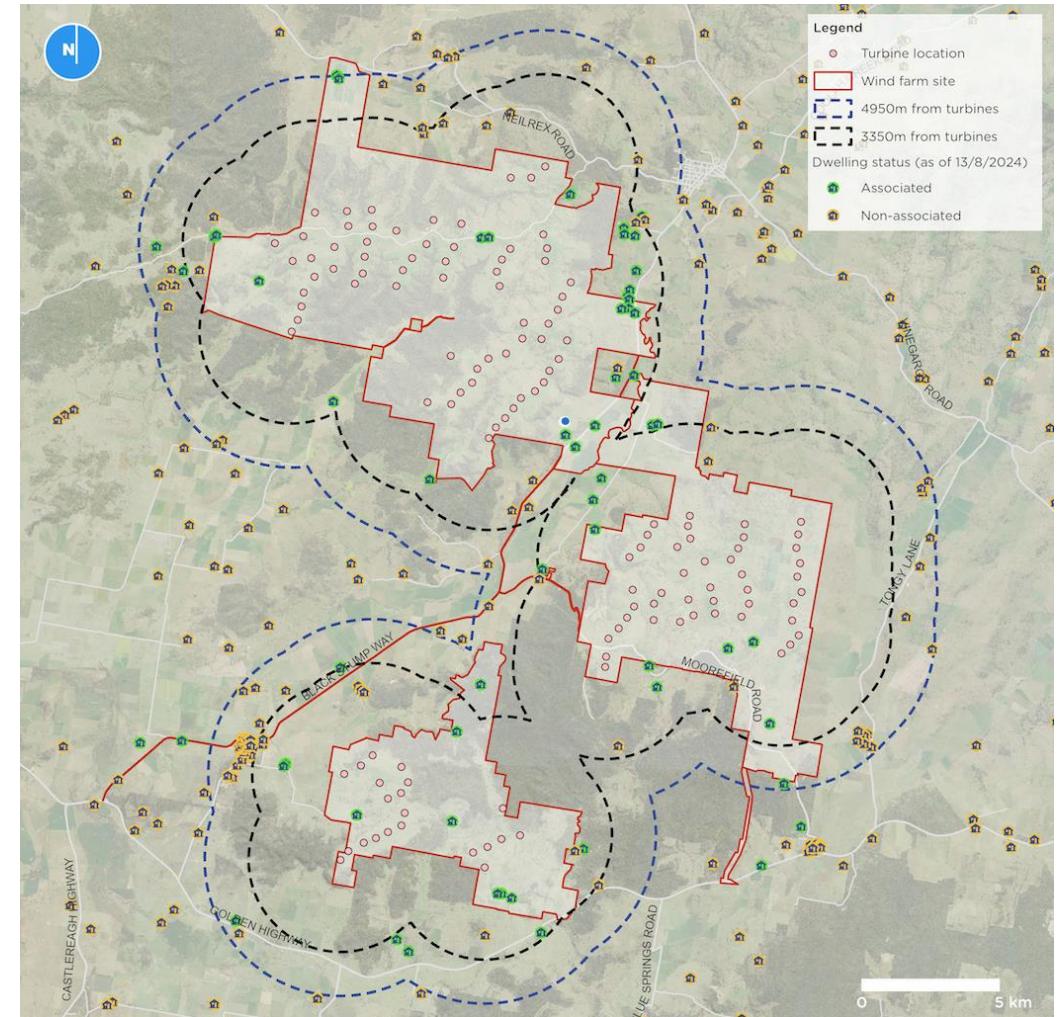


# Key Issues

# Visual impact

- Visual impacts was a key issue for stakeholders. Prior to submission of the EIS turbine numbers were reduced from **175** to **148** and at RTS to **131** in part to reduce visual impacts from neighbouring properties.
- Assessment carried out in accordance with the guidelines of the Wind Energy: Visual Assessment Bulletin for State significant wind energy development (the Bulletin) (DPE, 2016).
- 87** non associated receivers identified within 4.95km of the nearest turbine:
  - 23** within black line of visual magnitude (3.35km)
  - 64** within black and blue line of visual magnitude (4.95km)
- DPHI assessment concludes that **the project would meet all the visual performance objectives** in the Visual Bulletin for all residences within the black line. The Department is satisfied that the **project is suitable for the site and would not cause any unacceptable visual impacts on the surrounding non-associated residences.**

Distance from the nearest turbine	EIS project layout	Amended layout	Current layout	Variation
	Number of non-associated dwellings			
Within black line of visual magnitude: 3,350m	42	27	<b>23</b>	Reduction in 19 non-associated dwellings
Within blue line of visual magnitude: 4,950m	70	64	<b>64</b>	Reduction in 6 non-associated dwellings
Total	112	91	<b>87</b>	Reduction in 25 non-associated dwellings





# Visual impact

## Mitigation

- For a period of 5 years from commencement of construction, the owner of any non-associated residence within 4.95km of a turbine may ask for visual impact mitigation to minimise visual impacts of the development (Condition B1)
- All lighting of turbines (if required) and external lighting associated with the development will be designed to minimise any impacts, eg low intensity lighting, shielding, complies with guidance etc (Condition B3)
- Ensure shadow flicker will not exceed 30 hours at any non-associated residence (Condition B4)
- Neighbour Benefit Sharing Program – any residence within 5km of a turbine is eligible to be involved in ACEN's NBSP



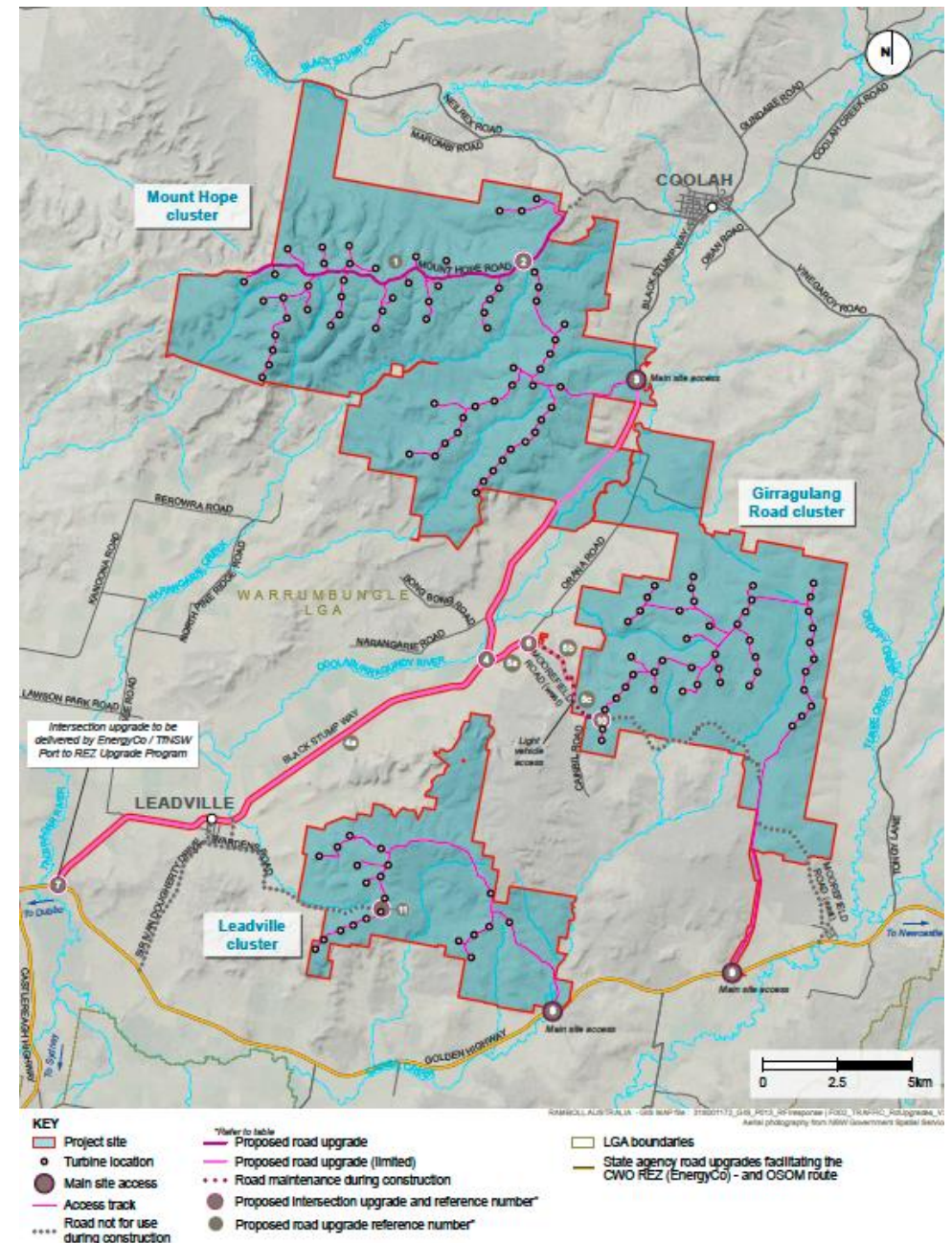
# Traffic & Transport

## Road upgrades

- Extensive consultation with WSC regarding extent of local road upgrades & TfNSW on intersection designs. Agreed and included in Appendix 5 of the Recommended conditions of consent
- Feedback from local community incorporated into proposal
- 3 primary accesses into site
- 1 light vehicle access into site
- Access on Neil Rex Rd, Moorefield Rd (east), Sir Ivan Dougherty Drive, Wardens Rd prohibited
- Agreed road upgrades include:
  - Mount Hope Rd
  - Moorefield Rd (west)
  - Black Stump Way
  - Associated intersections

## Mitigation

- The road upgrades (as above) will be implemented in accordance with the relevant timings to the satisfaction of the relevant roads authority (condition B33)
- Undertake pre and post road dilapidation surveys and make good any damage (Condition B36)





# Traffic & Transport

## Over-dimensional vehicle management

- Use of EnergyCo/TfNSW **Port to REZ** to facilitate access of (over-size over mass) OSOM and heavy vehicles from Port of Newcastle to Project
- **Traffic Management Plan** will be prepared in consultation with TfNSW, EnergyCo and WSC to detail measures that would be implemented to minimise traffic impacts during construction (Condition B38)
- EnergyCo are working with CWO-REZ participants to determine and **coordinate cumulative impacts** of OSOM deliveries across multiple projects in the CWO-REZ



# Biodiversity

- The project is located on land which has already been largely cleared to support livestock grazing and cropping activities, with areas of native vegetation (majority box gum woodland) throughout.
- The project has been designed to **avoid impacts to native vegetation & protected species where possible**, including:
  - Reduction in turbines from 175 at scoping to 148 at EIS and 131 in Amendment to the application (-44)
  - Locating project infrastructure in cleared areas and avoiding TEC, threatened species and areas of high conservation where practicable
  - Reducing development impact footprint from **1,318 ha** at EIS to **734.96 ha** (including reduction in box gum woodland and derived native grassland from 429 ha to 294.3 ha)
  - Locating turbines 200m away from bat cliff lines
  - Opportunities to minimise clearing will be sought during detailed design of the project



# Biodiversity

## Mitigation

- **Biodiversity Offsets** - the project would generate a biodiversity offset credit liability of **6,307 ecosystem credits** and **2,928 species credits**. Credits will be retired prior to commencement of construction (Condition B24)
- **Potential SAI impacts - Box Gum Woodland** – ACEN will secure land comprising 282 ha of BGW, in perpetuity for the purpose of restoring, enhancing and protecting this vegetation (Condition B26)
- **Bird and Bat Adaptive Management Plan (BBAMP)** - will be prepared prior to commissioning any turbines (Condition B27). This includes additional at height monitoring for bats & other specific measures.
- **Biodiversity Management Plan** – will be prepared in consultation with CPHR and DCCEEW prior to carrying out any development that could impact biodiversity values. This will focus on measures to minimise and manage any impacts on biodiversity. (Condition B26)

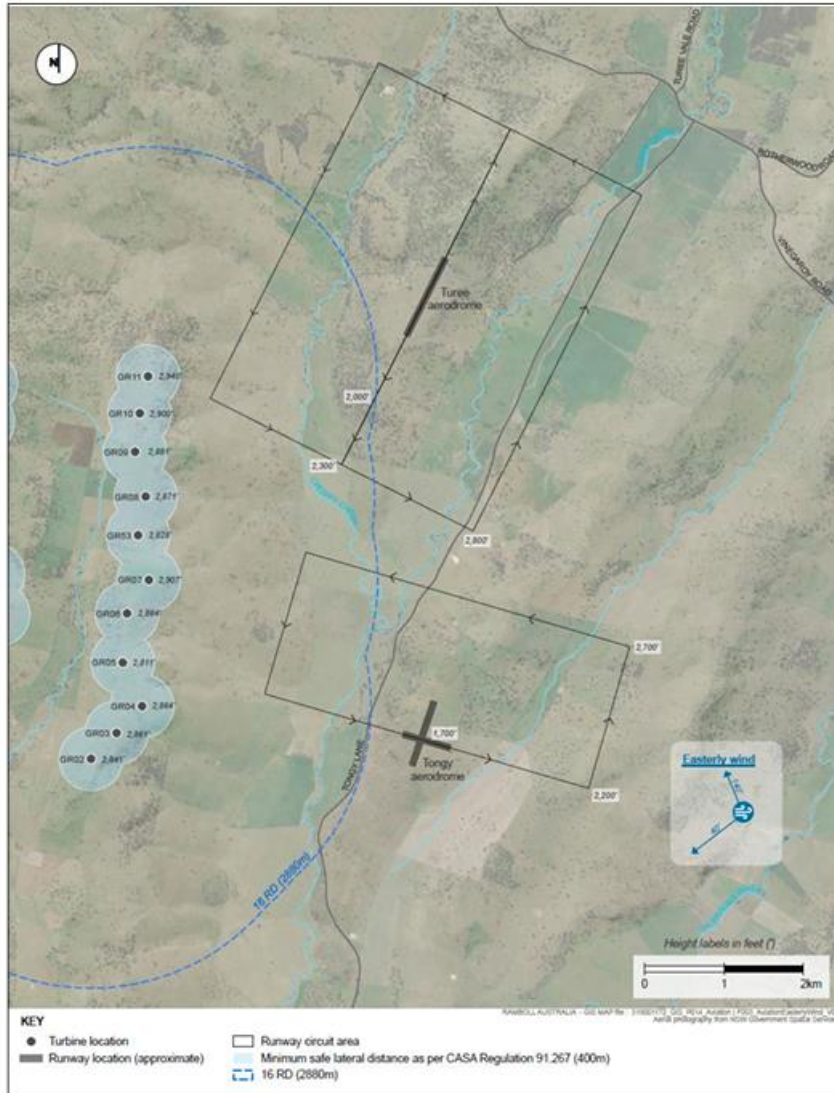
# Aviation safety

- Project is located ~6km south of Coolah airport and 56km north of Mudgee airport. There are 2 private air strips in proximity to the project: Turee (~3.2km from nearest turbine) and Tongy (~ 3.3km from nearest turbine)
- Airservices Australia advised that the maximum height of turbines MH13 and MH25 would affect the lowest safe altitude (LSALT) for air route W627.
  - MH13 was removed at RTS
  - Prior to construction of MH25, we will consult with AirServices Australia and request for the air route to be amended
- Concerns raised by the community regarding potential for wake turbulence and obstacle impacts at Turee and Tongy air strips were considered in detail.
  - Aviation Projects assessment concluded that the project would not have any adverse or significant impacts to air safety, subject to the implementation of mitigation measures and administrative controls.
  - DPHI's independent technical advisor To70 concluded that the Aviation Projects assessment sufficiently addresses the potential risk and mitigation measures of the wind turbines as obstacles to the Aircraft Landing Areas (ALAs) of Tongy and Turee.
  - ***Refer Figures on next slide.***

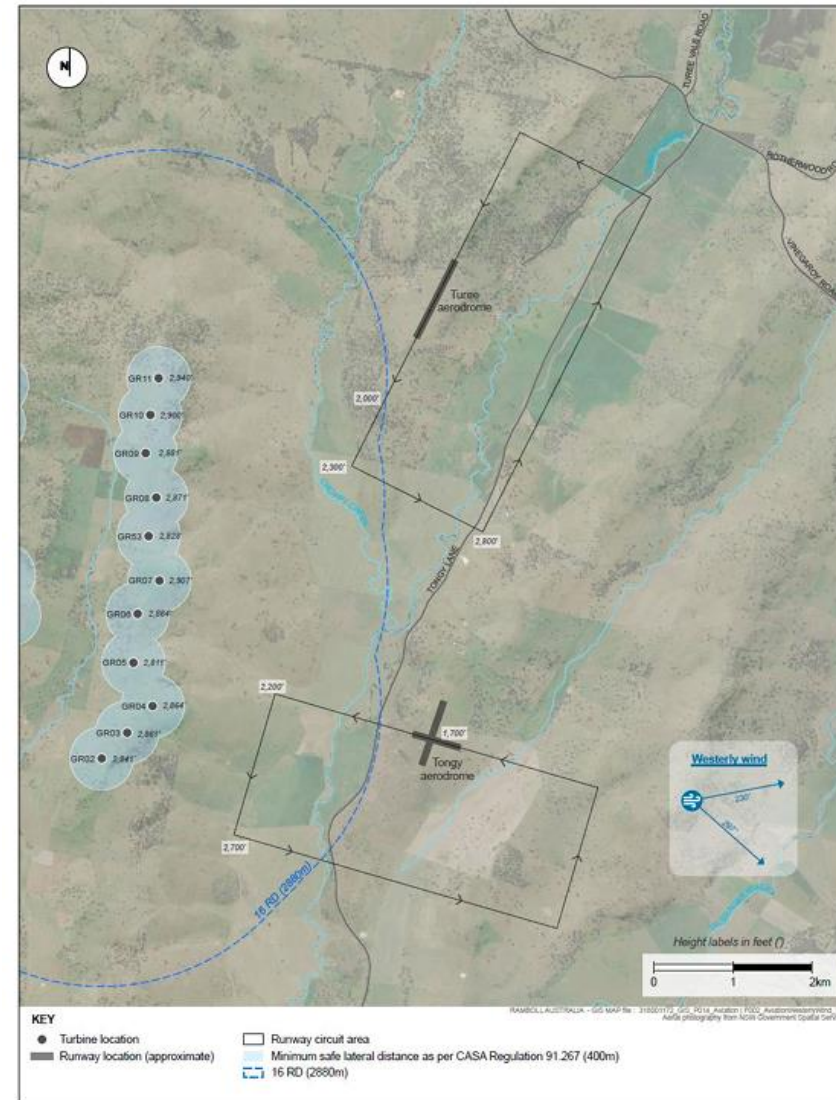


# Aviation safety

Standard circuit areas during an **easterly wind** and minimal safe lateral distance



Standard circuit areas during a **westerly wind** and minimal safe lateral distance



# Aviation safety

## Mitigation

- Prior to commencement of construction, develop and Aviation Management Plan in consultation with the operators of Tongy and Turee aerodromes (Condition B40)
- Carry out the development in accordance with relevant guidance (Condition B39)
- Prior to construction of any turbine or met mast notify relevant aviation organisations (Condition B41)
- Request for air route W627 to be amended in consultation with Airservices Australia (Condition B42)
- Bushfire Management Plan to include operational procedures in the event of a bushfire, eg shutting down turbines and positioning to minimise interference with aerial firefighting (Condition B54)

# Construction

## Waste management and water supply and management

### Waste management

- **General waste** – note that WSC do not want any waste disposed at their facilities. We have consulted with Dubbo Regional Council who has indicated it will receive solid waste streams during construction.
- **Sewage waste** - will either be treated onsite or removed offsite. Consideration has been given to upgrading a sewage treatment plant (STP) in a surrounding council area (such as the Mudgee STP or other opportunities in consultation with local Councils the region) to handle the increased volume of wastewater and sewage waste if necessary.

### Water supply - options include a combination of:

- Purchasing water from landowners with groundwater bores (discussions ongoing)
- Establishment of new groundwater bores
- Purchasing water from catchments and private dams
- Purchasing recycled water from local councils in surrounding LGAs
- Transporting water from surrounding unregulated water sources.
- Water treatment facility on site of temporary workforce accommodation

**ACEN is committed to ensuring it has sufficient water supply for all stages of development (Condition B19) and manage all waste responsibly (Condition B56)**



# Workforce accommodation

## 1. Use of local workforce

- We are committed to sourcing local content and supporting initiatives that support local business development and indigenous business development
- We will do this by working with EnergyCo to support their work to stimulate local business growth and employment in the CWO REZ, eg attending business / supplier open days
- We are also aware of the balance that is required so that the local workforce supply for key services such as healthcare is not disrupted.

## 2. Workers Camp and transportation to site

- Workers housed at the temporary workforce accommodation camp will access site as follows:
  - Travel west on Moorefield Rd (west) to Girragulang Cluster
  - Travel east on Moorefield Rd (west), south on Black Stump Way, east on Golden Highway to Leadville Cluster and Girragulang Cluster
  - Travel east on Moorefield Rd (west) and north on Black Stump Way to to Mount Hope Cluster

## 3. Use of regional tourist accommodation

- This will be limited based on use of temporary workforce accommodation camp for construction workers

**Prior to commencement of construction ACEN will prepare an Accommodation and Employment Strategy (Condition B59)**

# Early and extensive consultation

- Ongoing consultation with community since project initiation in 2019
- Community **drop in office** located in Coolah since 2022
- Locally based **CWO Community Engagement Manager**
- Held 11 in person **Community Information Sessions** (2020 to 2023, attended by over 250 people)
- Dedicated project information **phone line, project email and project website** with communications materials and all project documents and approvals
- Regular individual and group meetings, phone calls and correspondence with host landowners and neighbouring landowners
- **Survey of 100 people** in January 2022 and **semi-structured interviews** Dec 21 to Feb 22 with 51 respondents
- Regular presentations and meetings with **Warrumbungle Shire Council, Transport for NSW, CPHR, RAPs etc**
- Presentations to other **community organisations** (Uarbry Residents Group, March 2023)
- Regular project bulletins in the **Coolah District Diary**
- Engagement with several local organisations via our **Social Investment Program (SIP)** voluntary contribution of \$50,000 each year of project development, including: Leadville Community Association, Country Education Foundation of Coolah, CanAssist Dunedoo Branch, Coolah Rugby Club etc



# Decommissioning

- The 3 onsite **quarries** will be decommissioned within 6 months of the commencement of operation of the project and rehabilitated.
- The **temporary workforce accommodation camp** will be decommissioned within 12 months of commencing operation of the project and rehabilitated.
- The **Project** will be decommissioned within 18 months of the cessation of operations and will be rehabilitated in compliance with the rehabilitation objectives outlined in Condition B61





# Socio-economic

- Council requirement for specific and tangible social benefits
- VPA
- Ongoing consultation with WSC about how they can maximise the socio-economic benefits from the Project.
- Project benefits include:
  - Planning Agreement - \$1,050 / MW installed capacity p.a.
  - CWO Rez Access Fees – should we be successful – Base Fee includes \$1,700/MW for community and \$600/MW for employment purposes
  - Neighbour Benefit Sharing Scheme – offered up to 5km from turbines
  - Employment opportunities & local investment
  - Local road upgrades (Black Stump Way, Moorefield Rd, Mount Hope Rd)
  - Host landowner payments
  - Social Investment Program - \$50k per year in Development and Construction phase (eg Leadville water bore upgrade in 2024)



