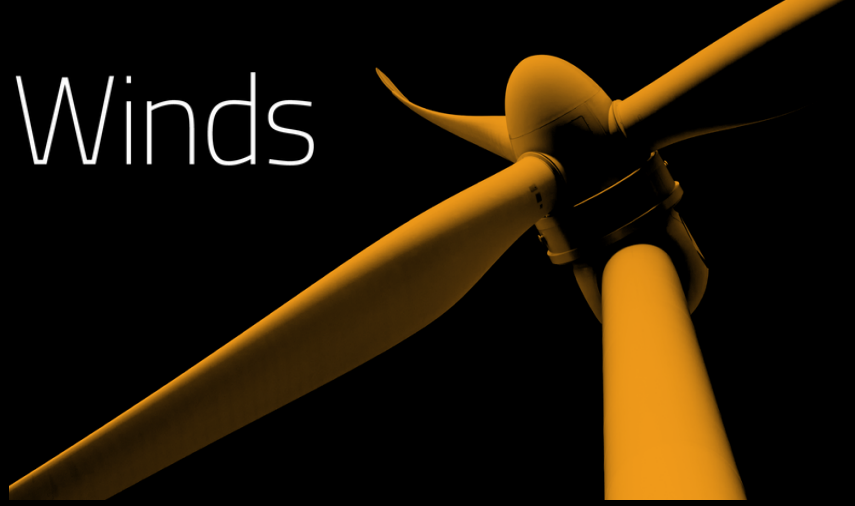


# Valley of the Winds

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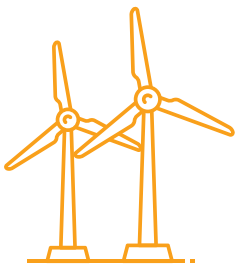


## Amendment Report 2023

In response to matters raised in the Environmental Impact Statement (EIS) public submissions and further agency, community and stakeholder consultation, we have made several amendments to our project to further mitigate environmental and social impacts.

We thank you for your feedback and understand that these Reports are long and technical and have provided the following summary of the key project amendments.

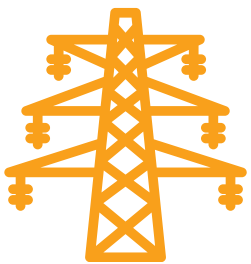
For copies of the Amendment Report and Response to Submissions Report, and associated documents, please visit <https://www.planningportal.nsw.gov.au/major-projects>.



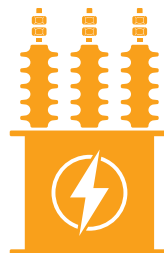
Refinements to the project layout to reduce environmental and social impacts, and improving the functional performance of the project



Refinements of the project layout and construction footprint to further avoid and minimise impacts to Box Gum Woodland and other native vegetation



Removal of the overhead transmission line running south from the Girragulang Road and Leadville clusters. This infrastructure will now be delivered by EnergyCo as part of the EnergyCo CWO-REZ Transmission Line project



An additional substation included in the Mount Hope cluster to improve the electrical connectivity



- Removal of light vehicle access to the Mount Hope cluster via Neilrex Road and to the Leadville cluster via the Leadville Stock Route and Wardens Road.
- Provision of an alternate access to the Girragulang Road cluster via the Golden Highway



Updated project boundary to remove a property from the Mount Hope cluster



Removal of three met masts and relocation of seven others to reduce biodiversity impacts



# Valley of the Winds

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## Response to Submissions Report (RTS)

The RTS has been prepared to consider and respond to the issues raised during public exhibition of the EIS. Following submission of the RTS report and a separate Amendment Report, The Department of Planning and Environment (DPE) will prepare an assessment report and provide their recommendation to the Independent Planning Commission (IPC) to make a determination on the project.

The submissions received have been categorised, grouped and addressed by issue, consistent with State Significant Development Guidelines – Preparing a Submissions Report (Department of Planning and Environment, 2021).

In response to submissions received, further community and other stakeholder consultation, and further design works, ACEN Australia is proposing to make amendments to the project that was included in the original development application.

An amendment report has been prepared which describes in detail the proposed amendment and further assessments that have been undertaken following exhibition of the EIS.

Proposed amendments include:

- refinements to the wind farm layout to reduce environmental and social impacts, and
- improving the functional performance of the project
- removal of the overhead transmission line running south from the Girragulang Road and Leadville clusters
- updates to proposed access routes for the Mount Hope and Leadville clusters, and
- provision of an alternate access route option to the Girragulang Road cluster.

Of the 114 submissions received, 59% were from within the Warrumbungle Shire Council LGA.

The most common matters raised in the submissions included concerns around landscape character and visual amenity, hazards and risks (aviation), economics and biodiversity.

A Response to Submissions report has been prepared and submitted to Department of Planning and Environment in conjunction with the Amendment Report, that responds to the matters raised in these submissions in accordance with clause 59(2) of the Environmental Planning and Assessment Regulation 2021. These Reports can be found at <https://www.planningportal.nsw.gov.au/major-projects>.



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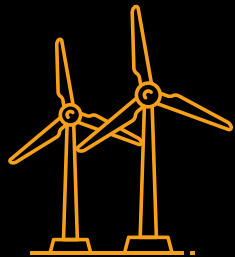


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# Valley of the Winds

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## Amendment Report Project Layout



We have made the following refinements to the project layout to reduce environmental and social impacts, and improve the functional performance of the project

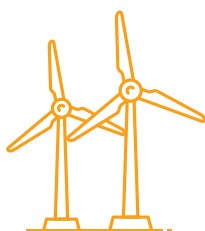
### Girragulang Road cluster

Six (6) turbines have been removed from the Girragulang Road cluster as part of the amended project to address impacts to Tongy Lane.

### Mount Hope cluster

In total ACEN has proposed to remove 11 turbines from the Mount Hope Cluster.

**148**  
turbines  
original  
proposal



**131**  
turbines  
revised  
proposal

The removal of 17 turbines (11% reduction in turbines) and associated infrastructure, including refined access tracks and hardstands, and removal of the electrical connectivity to the CWO REZ transmission line, has resulted in a 47% reduction in the development site from 1,318 to 695 hectares.

The majority of this reduction has come from reducing the size of the development corridor across the project, with only 11% of reduction equated to removing the transmission line.

## Summary of matters raised

- Visual impact on non-associated dwellings particularly impacts from both primary living spaces as well as views from other parts of the property
- Overshadowing properties in Coolah as well as the visual impact associated with the transmission lines on nearby towns and villages
- Visual impact on public viewpoints such as public roads and the Coolah and Turee Creek valleys
- Visual impacts due to scale and type of infrastructure
- Conflict with existing landscape and cumulative impacts resulting from other large scale renewable projects in the Central West
- General health impact arising from the turbines at northern end of the Girragalang cluster and the potential impacts they may have on the health of non-associated residences.
- Concerns raised regarding the regarding traffic impact on township of Uarabry



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[info@valleyofthewinds.com.au](mailto:info@valleyofthewinds.com.au)



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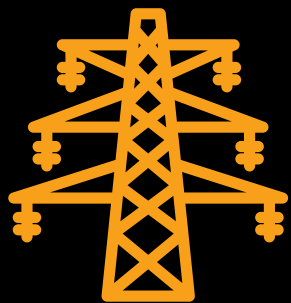


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# Valley of the Winds

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## Amendment Report 2023 Transmission infrastructure



We have made the following refinements to the project layout to reduce environmental and social impacts, and improve the functional performance of the project

## Summary of matters raised

- Additional detail on transmission line connection for the project and details on associated infrastructure

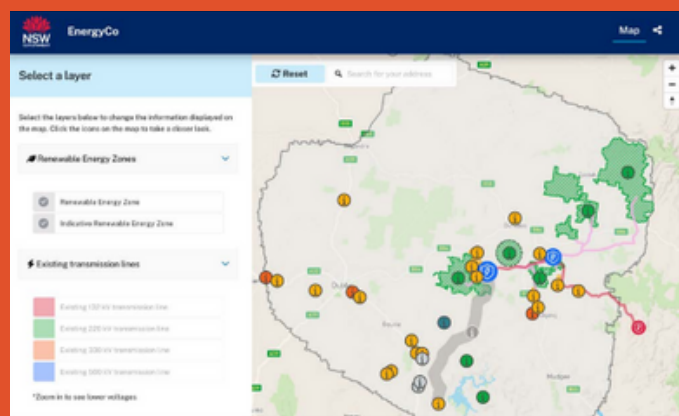
ACEN Australia submitted the EIS (Environmental Impact Statement) prior to the release of the EnergyCo Transmission Line scoping report (September 2022) and as such did not have details of the final location of the proposed transmission line.

Following release of the EnergyCo Transmission Line scoping report and consultation with EnergyCo, the proposed Valley of the Winds transmission line has since been removed from the Project, as it will be separately developed by EnergyCo as part of their Central-West Orana Renewable Energy Zone Transmission project.

## Central-West Orana Renewable Energy Zone Transmission project

The Central-West Orana Renewable Energy Zone (REZ) will be serviced by new transmission network infrastructure, including high-capacity transmission lines and energy hubs, which will transfer power generated by solar and wind farms to electricity consumers. This infrastructure will be critical for the successful operation of the REZ. EnergyCo is leading the development of the REZ transmission network infrastructure in its capacity as the Infrastructure Planner for the REZs in NSW.

EnergyCo is responsible for developing and overseeing the planning and approval processes for the REZ network infrastructure. Following a competitive tender process, EnergyCo has appointed a Network Operator to design, build, finance, operate and maintain the REZ transmission network.



EnergyCo has published an interactive online map which shows key features of the Central-West Orana REZ, including the transmission project study corridor. The map is available to view online at: [caportal.com.au/energyco/rez](http://caportal.com.au/energyco/rez).



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[info@valleyofthewinds.com.au](mailto:info@valleyofthewinds.com.au)



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# Valley of the Winds

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## Amendment Report Traffic and Transport



We have made the following refinements to the project layout to reduce environmental and social impacts, and improve the functional performance of the project

Following feedback from Warrumbungle Shire Council, the below road upgrades that were previously included in the EIS have now been removed, and no longer form part of the Project:

- Upgrade of Neilrex Road and Mount Hope Road intersection – it was agreed that the proposed light vehicle access via Neilrex Road would not be included, and this intersection upgrade would therefore not be required.
- A single point of access to the Mount Hope cluster via the proposed access from Black Stump Way is now proposed.
- Upgrade of the Leadville Stock Route and Wardens Road, including the intersection with Black Stump Way – it was agreed that the proposed light vehicle access via Leadville Stock Route and Wardens Road would not be included. A single point of access to the Leadville cluster is now proposed.

Access to the Girragulang Road and Leadville clusters will now be from the Golden Highway via proposed intersection and road upgrades

Access to the Mount Hope Cluster will be via Black Stump Way and a proposed new intersection and access road.

## Summary of matters raised

- Access should be via the properties of host landholders only
- Impact of access routes on agricultural land
- Opposition to the use of Moorefield Road for access
- Traffic generated during construction and noise impacts from construction traffic

## Heavy vehicle access routes

Transportation of some project components, such as wind turbine blades, nacelles and transformers, would require OSOM\* vehicles that exceed the regulatory limits of standard vehicle dimensions.

Large components, such as wind turbine blades, would be shipped to Australia from overseas and transported to the Project site from the Port of Newcastle, accessing the worksites by the following route:

- Industrial Drive
- Pacific Highway
- New England Highway
- Hunter Expressway
- New England Highway
- Golden Highway

\*Over Size Over Mass

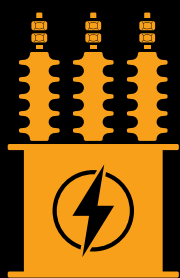




# Valley of the Winds

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## Amendment Report Additional Substation



We have made the following refinements to the project layout to reduce environmental and social impacts, and improve the functional performance of the project

While refining the project's electrical design, it was found that including an additional substation within the Mt Hope cluster would reduce the need for overhead lines, reducing both the aesthetic impact and assisting the electricity transfer.

This additional substation within Mount Hope would not be visible from Black Stump Way or the nearest dwellings.

Topography and existing roadside vegetation will fragment views to the additional substation at Mount Hope cluster with similar restricted views to the Girragulang Road and Leadville substations from surrounding lands.

This means the project will now have 4 substations.

Substations are a vital piece of infrastructure for any wind project.

This is where all the energy produced by wind turbines is collected and converted by transformers to the high voltage transmission network

They are necessary to ensure that as little energy as possible is lost during transmission over long distances.

The image on the right is an example of a substation.



## Summary of matters raised

Submissions received stated that the turbines and transmission infrastructure are too large for the rural context of the projects setting and the scale of the project and nearby projects will change the rural character of the area and dominate the landscape.

Diagrams have been prepared for each of the substations in the amended project to provide an analysis of the potential visibility of each substation from surrounding public and private viewpoint locations.



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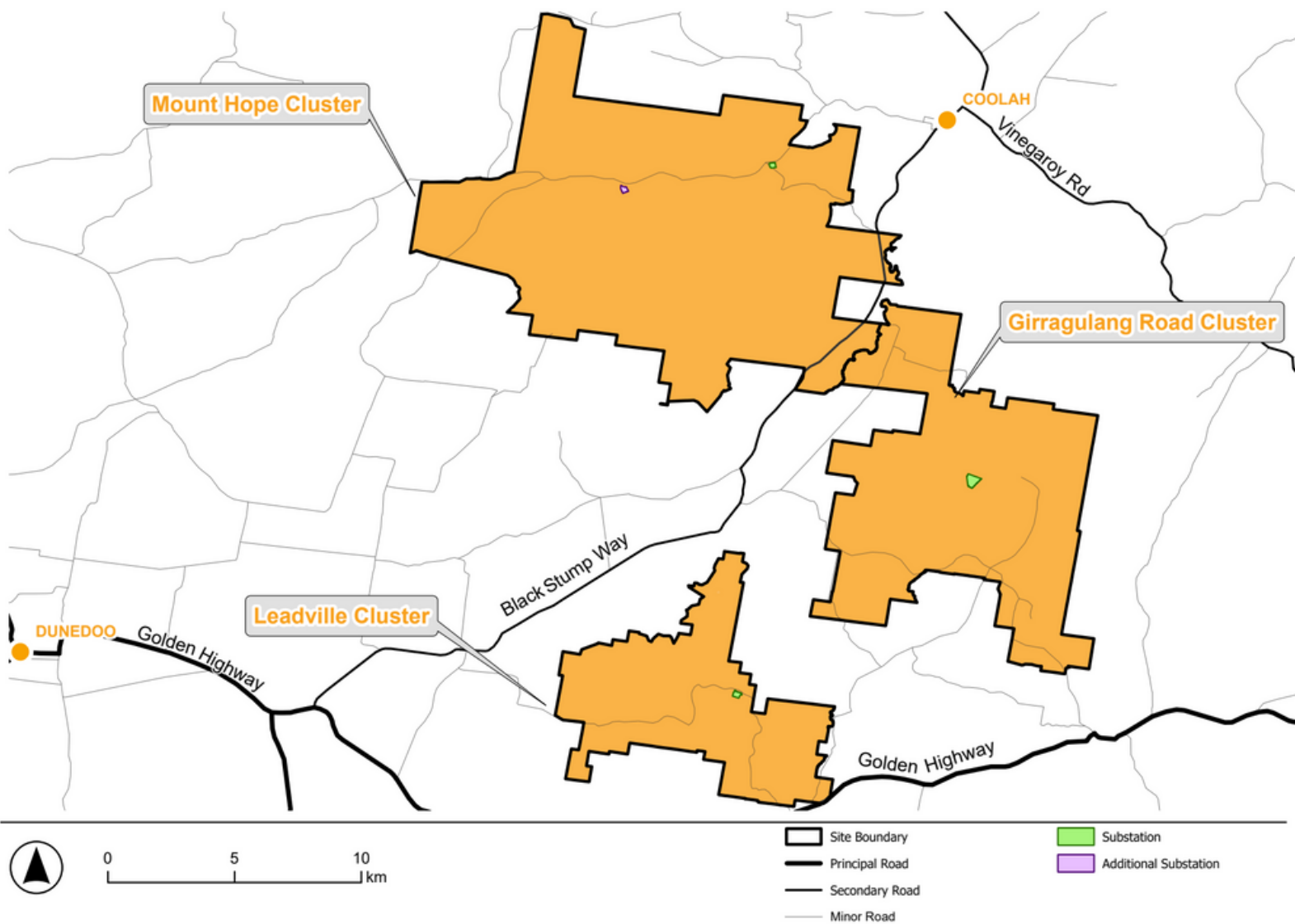


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# Valley of the Winds

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## Amendment Report Additional Substation



# Valley of the Winds

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## Amendment Report Biodiversity



We have made the following refinements to the project layout to reduce environmental and social impacts, and improve the functional performance of the project

ACEN Australia has designed the development site by taking steps to avoid, minimise and mitigate impacts to biodiversity values.

ACEN has removed 17 turbines from the EIS wind farm layout to reduce amenity impacts for nearby dwellings and biodiversity impacts.

This refinement follows extensive consultation with The Department of Planning and Environment as well as Biodiversity Conservation and Science Department regarding the extent of potential impact on threatened ecological communities and other native vegetation and the project's ability to demonstrate the principles of 'avoid and minimise' regarding impacts to biodiversity.

In addition to the projects biodiversity offsetting requirements, ACEN has committed to Additional Appropriate Mitigation measures to ensure that any adverse biodiversity impacts are mitigated. These substantial additional measures are outside of the legislative requirements and will see addition remnant grass and woodlands revegetated and protected in perpetuity.

The removal of 17 turbines (11% reduction in turbines) and associated infrastructure, including revised access tracks and hardstands, and removal of the electrical connectivity to the CWO REZ transmission line, has resulted in a 47% reduction in the development site from 1,318 to 695 hectares.

Our revised footprint has reduced impacts to native vegetation across the site by 38%

## Summary of matters raised

- Submissions commented on the direct impacts on native flora and fauna resulting from vegetation clearance and bird strikes associated with the construction and operation of the project and suggested that the project has not avoided biodiversity impacts through its refinement.

The biodiversity assessment included the following:

- desktop review of background information, mapping, and publicly available databases
- extensive field surveys within the wind project site
- quantification of potential impacts to biodiversity values
- calculation of the biodiversity offsets that may be required, and development of management and mitigation measures to reduce potential impacts



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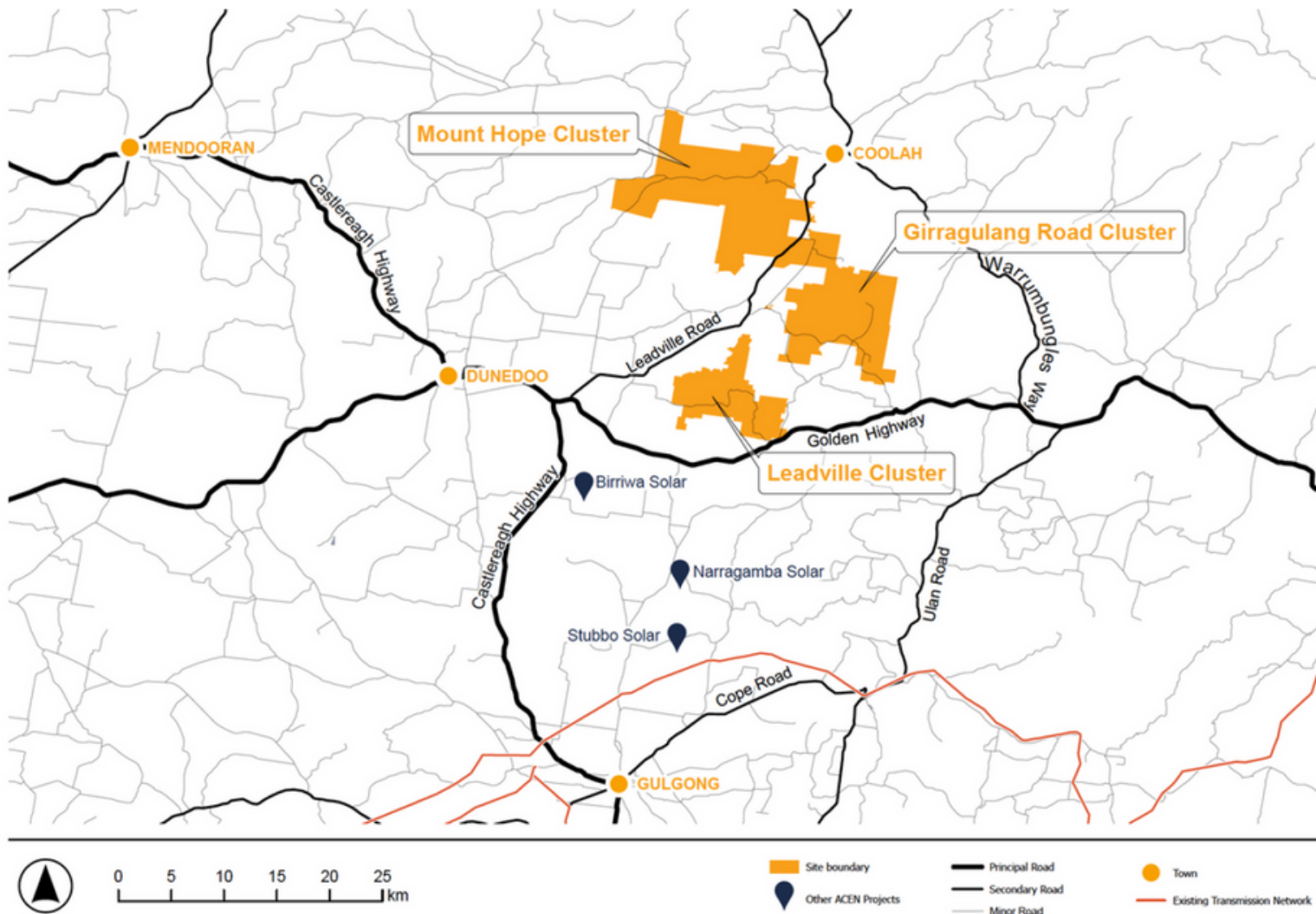
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## Project layout

## Valley of the Winds

The Valley of the Winds project consists of 131 wind turbines located within three clusters - Mount Hope, Girragulang Road and Leadville.

The clusters will be connected electrically, with the electricity generated being injected into the National Electricity Market.



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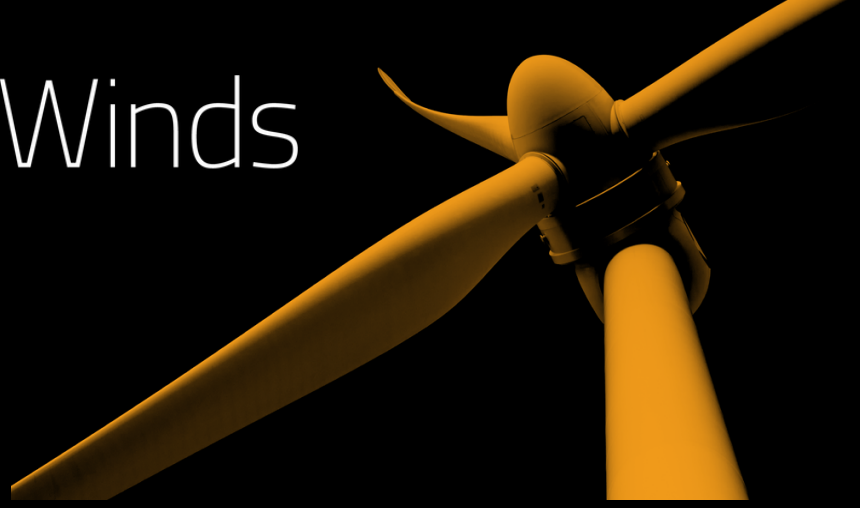
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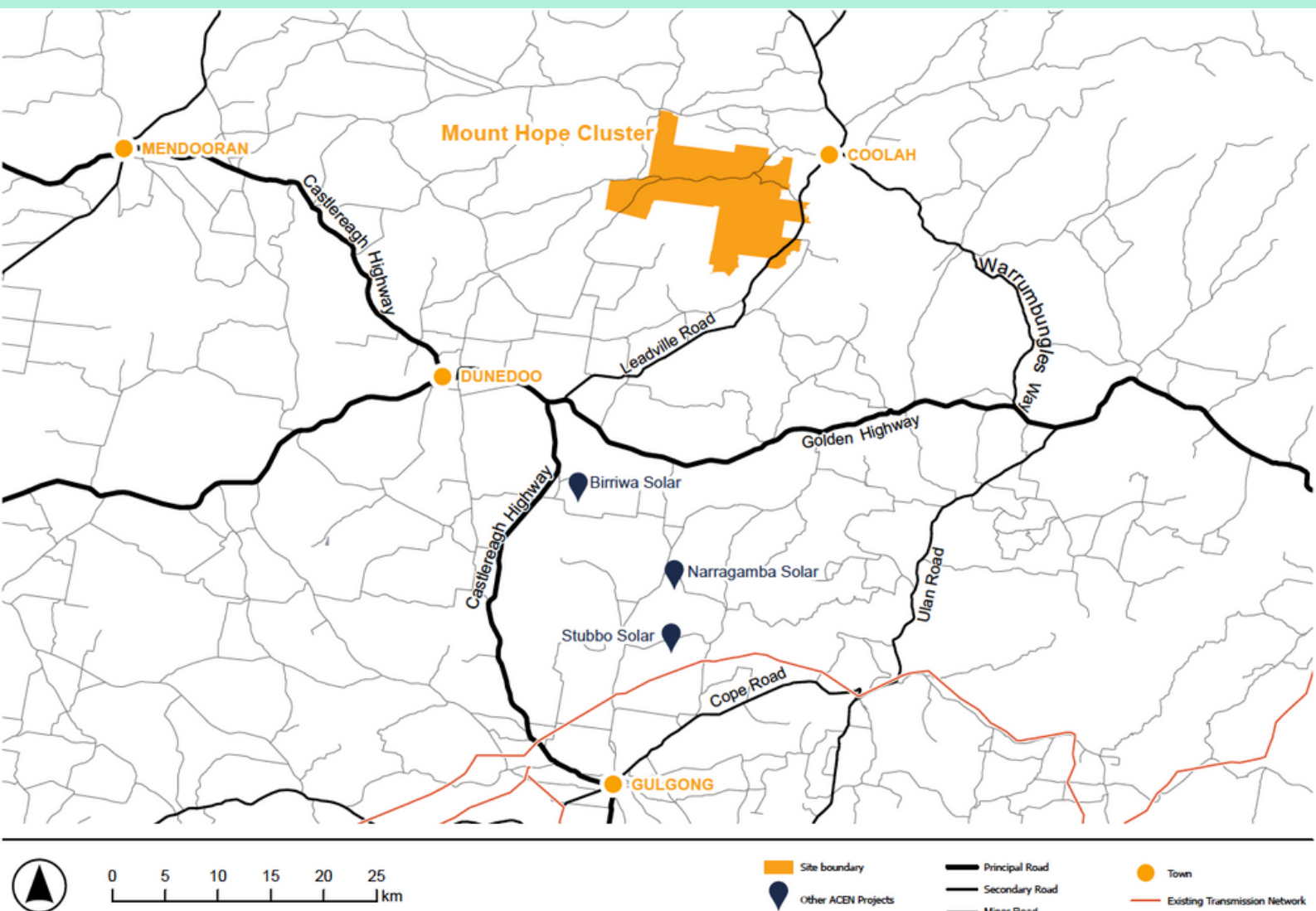
## Project layout

### Mount Hope Cluster

The Mount Hope cluster is the northern most cluster, closest to Coolah.

The cluster contains **65 turbines**, two collector substation, underground electrical reticulation and access tracks. This cluster contains overhead transmission lines dispatching electricity to the central substation located in the Girragulung cluster.

Access would be via Black Stump Way, south of Coolah.



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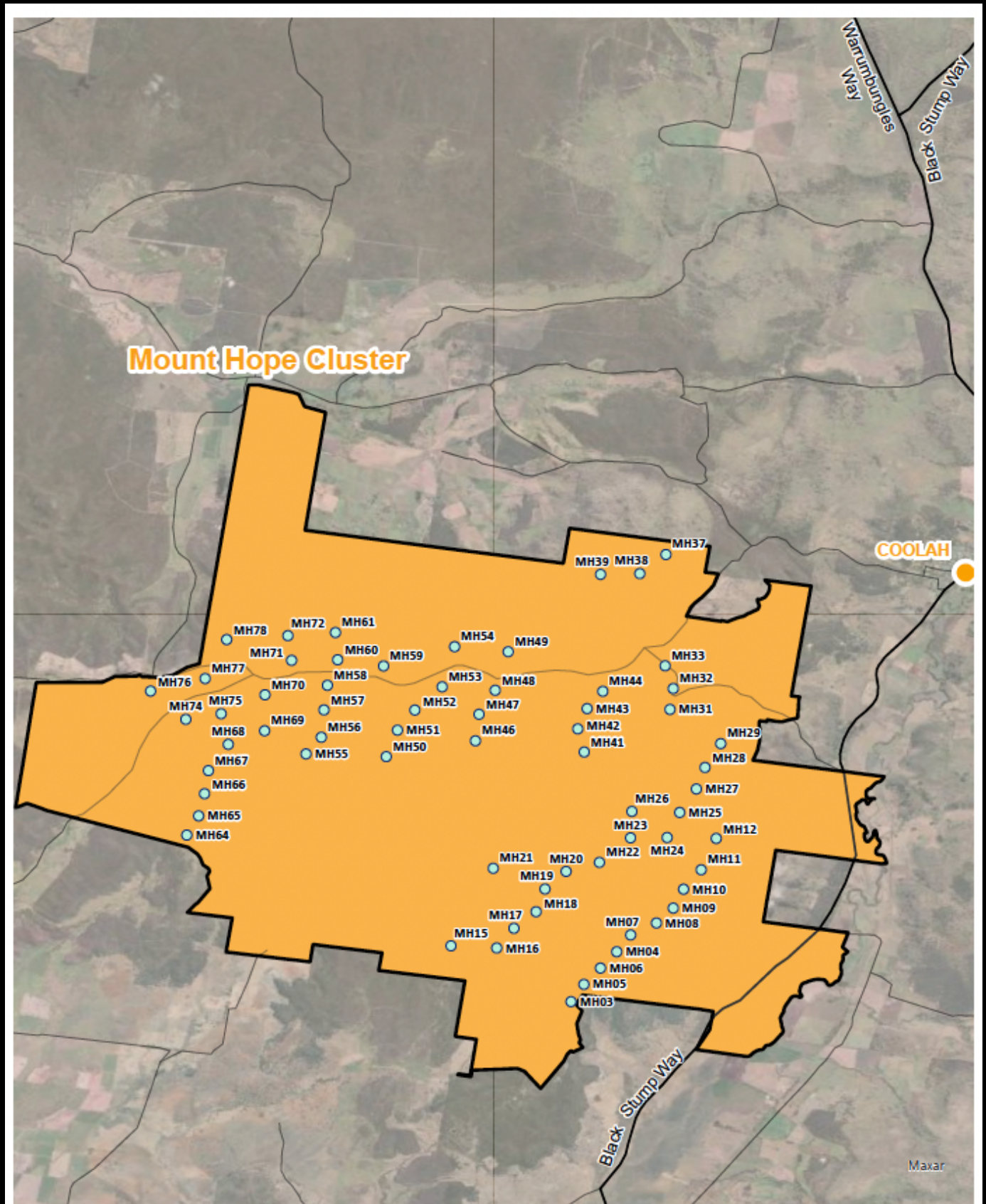
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# Mount Hope Cluster



0 5 km

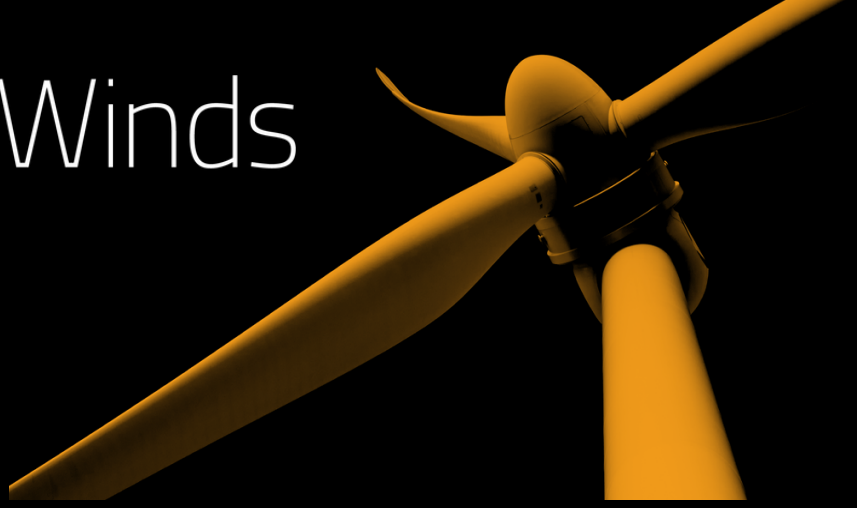
- Wind Turbine
- Site Boundary
- Secondary Road
- Minor Road

# Valley of the Winds

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## Project layout

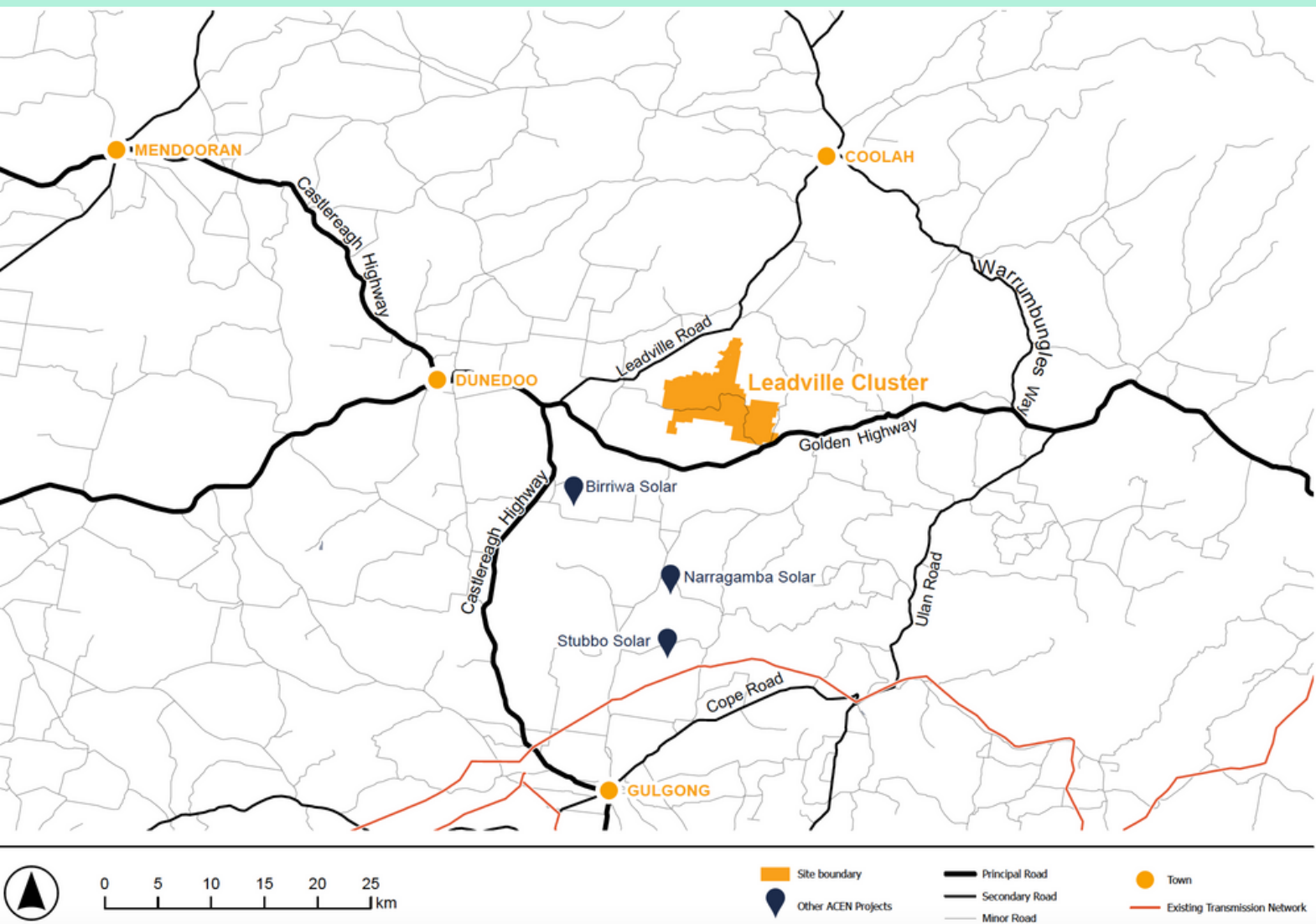
### Leadville Cluster



The Leadville cluster is the southernmost cluster, closest to Leadville.

The cluster contains **21 turbines**, access tracks and underground electrical reticulation connecting the turbines to the collector substation within the cluster. Overhead transmission lines will export the electricity from the substation via the CWO-REZ infrastructure.

This cluster will be accessed via a new access point on the Golden Highway.



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[info@valleyofthewinds.com.au](mailto:info@valleyofthewinds.com.au)



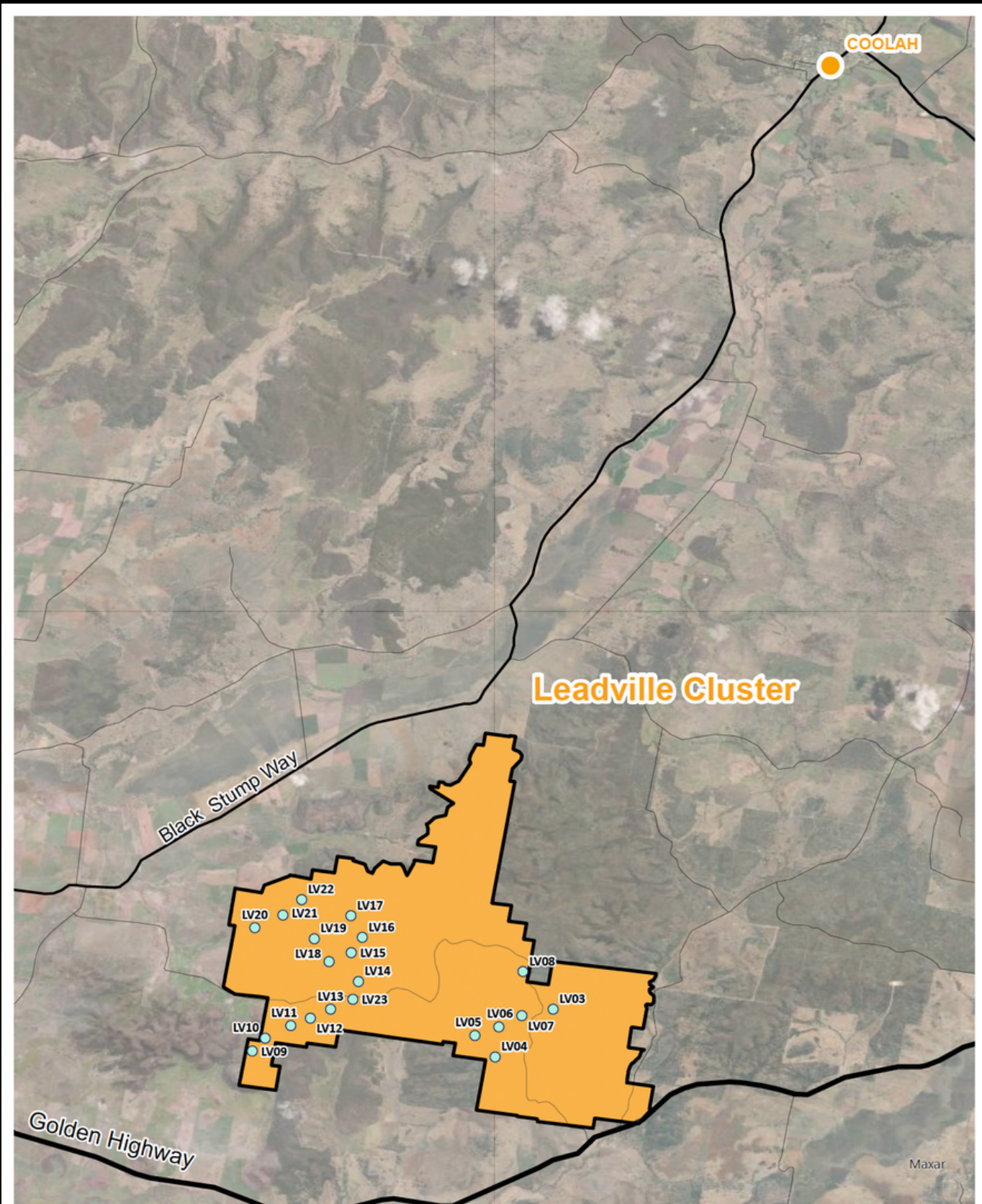
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# Leadville Cluster



0 5 km

Site Boundary

Wind Turbine

Principal Road

Secondary Road

Minor Road



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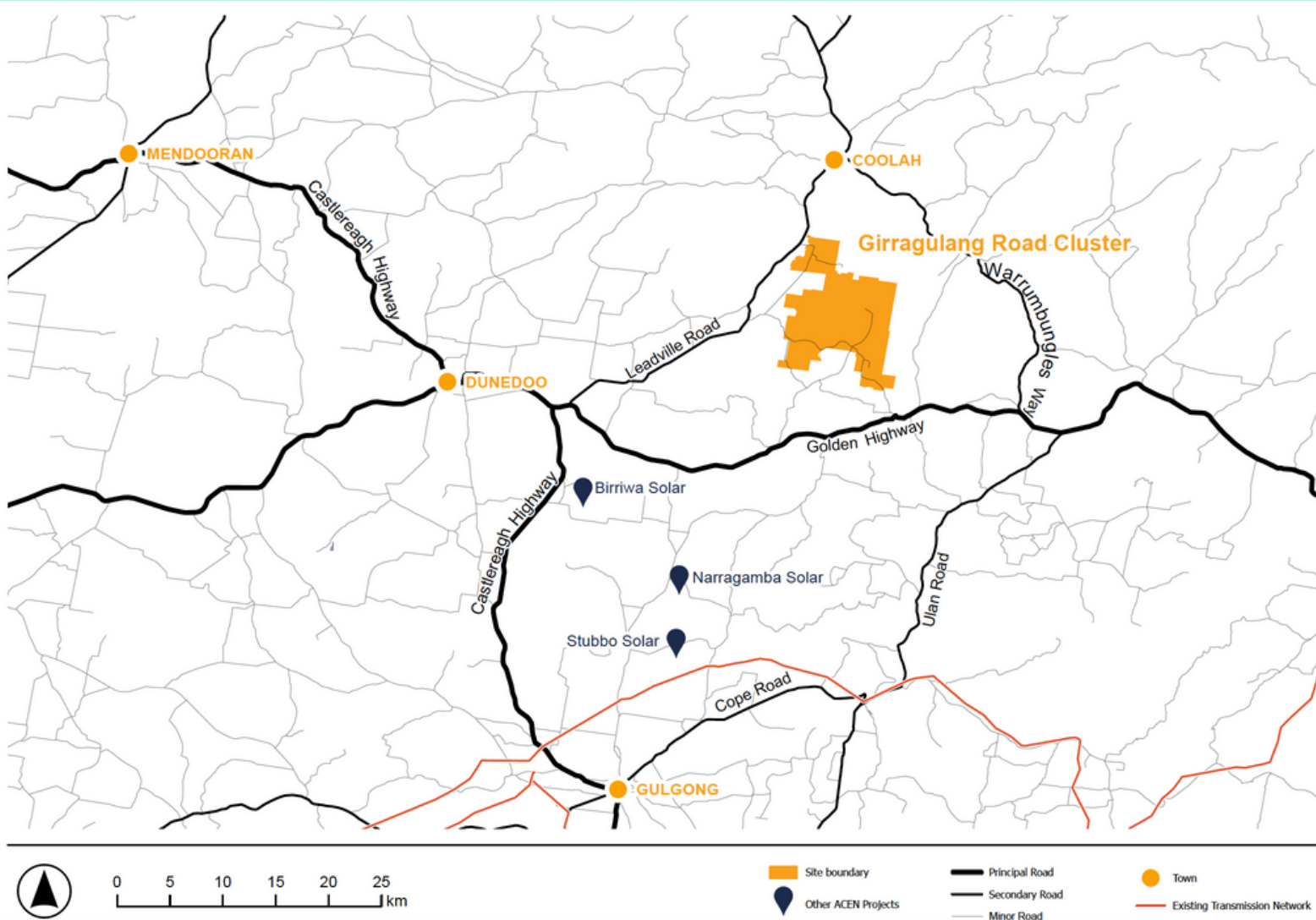
## Project layout

### Girragulang Road Cluster

Girragulang Road cluster is located south of Coolah and north of the Golden Highway.

The cluster contains **45 turbines**, internal access tracks, the central substation for the project as well as underground electrical reticulation connecting the turbines to the substation. Overhead transmission from this cluster exports the electricity from the central substation via the CWO-REZ infrastructure.

Access will either be via Short Street within the Uarby township, or via the Golden Highway through private property.



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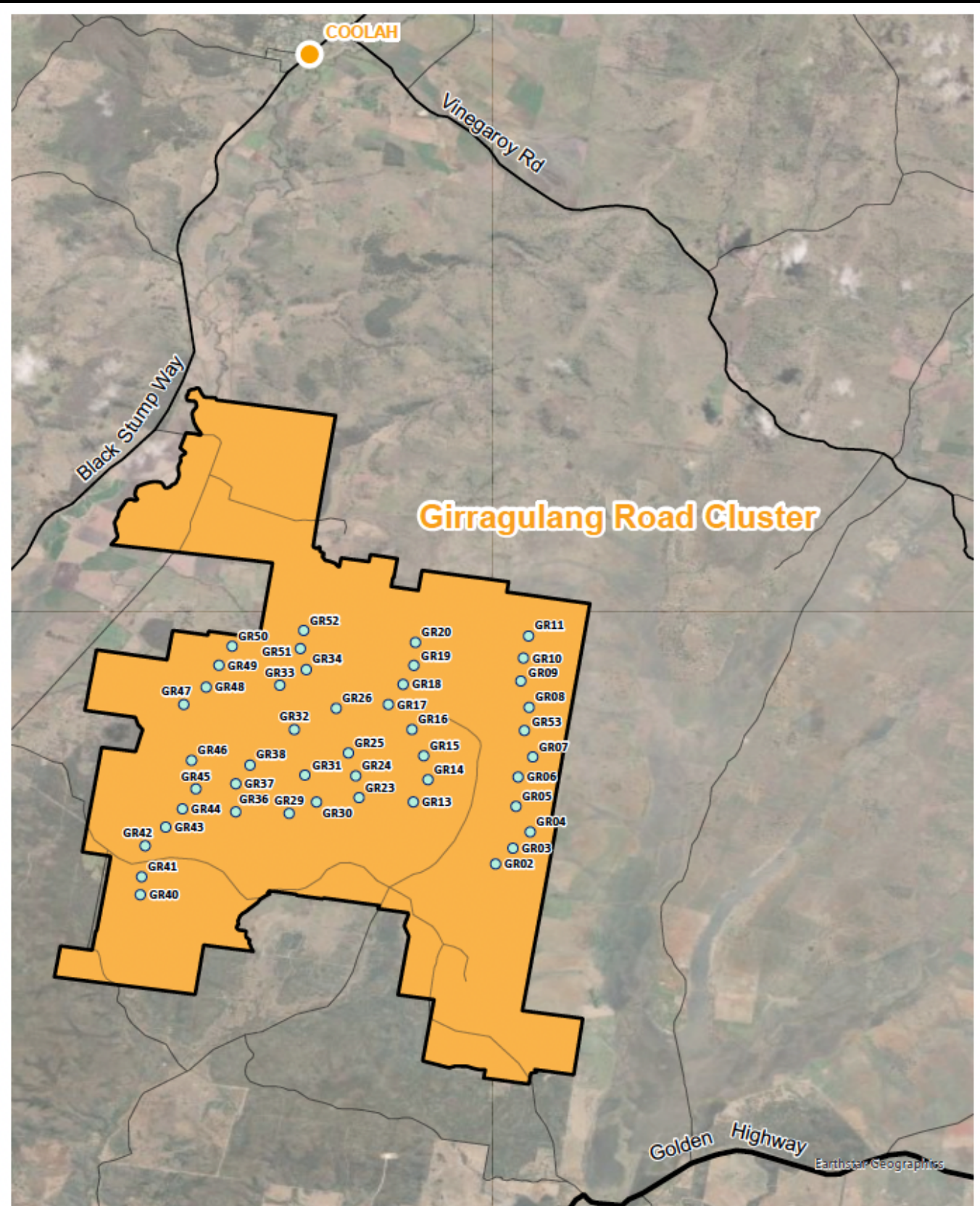
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# Girragulang Road Cluster



0 5 km

Site Boundary

Wind Turbine

Principal Road

Secondary Road

Minor Road



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