# EIS Volume 2 Appendix G Stakeholder Consultation Materials







## Appendix G Stakeholder Consultation Materials

#### Stakeholder Consultation

Chapter 6 of the EIS presents a summary of the key engagement activities undertaken and channels utilised to consult with stakeholders in relation to Project EnergyConnect. These include:

- telephone and email
- Project EnergyConnect website
- online interactive mapping platform
- online EIS virtual engagement room
- one on one meetings, key stakeholder briefings and workshops
- key stakeholder site visits
- Steering Committee and Working Group meetings
- community drop-in sessions
- Riverland Field Days
- interactive hubs
- 'The Connector' e-newsletters
- social media
- media and advertisements

The fact sheets prepared to inform the community on the progress of the Project investigations are provided in this Appendix.



## What is Project EnergyConnect?

Project EnergyConnect is a landmark infrastructure project, which will deliver the first new electricity interconnector between Australian states in 15 years. An electricity interconnector is a connection that allows power to flow between regions in the National Electricity Market (NEM), providing access to a larger number of electricity generators. Interconnectors are common around the world, including here in Australia.

Project EnergyConnect will involve the construction of an approximately 900 km above ground transmission line, with approximately 800MW transfer capacity. Project EnergyConnect will connect South Australia (SA) and New South Wales (NSW), with an added connection to north west Victoria.

Project EnergyConnect is being delivered jointly by ElectraNet (SA) and TransGrid (NSW).



# **Project Overview**



### Why is Project EnergyConnect Needed?

The Australian energy landscape is changing, as we transition away from traditional fossil fuel-based electricity generation to a greater mix of renewable energy sources. The main drivers of this change include:

- Closure of traditional coal-fired power plants in SA and further planned closures of ageing coal-fired power plants interstate
- Reduced cost and increasing penetration of renewable energy generation (wind and solar) and uptake of rooftop photovoltaic systems in SA
- Government commitments to reduce carbon emissions
- Demand for more reliable and affordable electricity.

To support this transition, new investment into transmission infrastructure that supports the connection of renewable energy generators and transports energy to consumers is required.

## What are the Project Benefits for South Australia?

If approved, Project EnergyConnect would deliver a range of direct benefits for consumers in SA, NSW and Victoria. In SA these would include:

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### Lower Power Prices

• Typical residential electricity bills are estimated to be reduced annually by \$100 in SA.

### Minproved Energy Security

- Enabling a greater mix of renewable energy generators to connect into the network
- Increasing reliability and confidence in electricity supply.



## Increased Economic Activity

- Approximately 200 jobs will be created in SA during construction.
- Enabling the development of new renewable projects at connection points and facilitating the growth of associated industries.
- Creating approximately 250 ongoing jobs in SA



Community and Stakeholder Engagement

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# **Project Overview**



### **Community Engagement**

Extensive specialist studies and stakeholder consultation has occurred to date to both select an appropriate route and assess potential environmental and social impacts. Landowners, Commonwealth and State government, local councils, community members, and interest groups have been instrumental in providing insights in selecting the route and assessing potential impacts.

Engagement with stakeholders will continue as the environmental assessment and approval process progresses and throughout the life of the Project.



Further detail on the potential impacts and proposed mitigation measures will be contained in the Environmental Impact Statement (EIS) which is currently being concluded and will be on public exhibition soon. In the interim, ElectraNet welcomes your feedback on the preliminary findings.

#### Stay connected

You can obtain more information, be kept up to date with Project information and provide feedback by visiting the online Environmental Impact Statement virtual engagement room on our website or by contacting the Project team.

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# **Route Selection**



Project EnergyConnect is a landmark infrastructure project that will deliver the first new electricity interconnector between Australian states in 15 years. An electricity interconnector is a connection that allows power to flow between regions in the National Electricity Market (NEM), providing access to a larger number of renewable electricity generators.

To maximise the benefits of Project EnergyConnect, the transmission line route needs to connect Renewable Energy Zones (REZ) in South Australia (SA), New South Wales (NSW) and Victoria, supporting future renewable energy projects to connect into the national grid.

A rigorous route selection process was undertaken to determine where the proposed interconnector would connect and assess the route alternatives between these connection points.

### Step 1 : Identify Start and End Points

Since 2016, ElectraNet has worked with the Australian Energy Regulator (AER) and a range of stakeholders to find the best way to connect the states to get the most benefit for the NEM. This process is known as Regulatory Investment Test for Transmission (RIT-T), and is required before any major investment into the electricity network is made.

The RIT-T process concluded that an interconnector between Robertstown in SA and Wagga Wagga in NSW, with connection into Victoria, would provide the most benefit to consumers and to grid stability. In addition, the interconnector must also cross Renewable Energy Zones to enable future renewable energy projects to connect into the national grid. This means the start and end points are fixed.

### Step 2 : Establishing the Investigation Corridor

While the most cost-effective alignment for the interconnector would be to take a straight line between the start and end points, this approach is not viable for a range of environmental, social, land use and engineering reasons.

As such, ElectraNet carried out a range of investigations and stakeholder engagement to identify constraints and opportunities to minimise environmental impact between Robertstown and the SA - NSW border.

- Constraints include intensive agriculture, licensed airstrips, conservation areas and known cultural heritage sites, native vegetation, and protected species.
- Opportunities include alignment of the new transmission line with existing transmission infrastructure, fence lines, roads and access tracks.

Identifying areas to be avoided and opportunities to minimise potential impacts assisted in establishing an initial 20km-wide investigation corridor.



## ElectraNet

# **Route Selection**



### Step 3 : Refining the Area of Investigation

After the investigation corridor was established, ElectraNet spent considerable time investigating potential route options in SA by conducting a range of studies within the investigation corridor. Investigation findings were tested with stakeholders and assisted in narrowing the investigation corridor for further evaluation and engagement.





### Step 4 : Selecting the Preferred Transmission Line Corridor

ElectraNet further explored multiple micro-route options within the investigation corridor through a detailed Multi-Criteria Analysis (MCA), with input from specialist studies and in close consultation with potentially affected landholders, Traditional Owner groups and State and Commonwealth government authorities.

Based on the results of the MCA and consultation, ElectraNet has identified a 1km transmission line corridor which is the subject of assessment in the Environmental Impact Statement (EIS).

Subject to Project approvals, the proposed transmission line alignment and location of infrastructure will be subject to further refinement and micro-siting to minimise potential impacts on environmental and social receptors. ElectraNet will continue landholder negotiations, stakeholder engagement, detailed environmental and cultural heritage surveys, and environmental management planning during the detailed design process.



Further detail on the potential impacts and proposed mitigation measures will be contained in the Environmental Impact Statement (EIS) which is currently being concluded and will be on public exhibition soon. In the interim, ElectraNet welcomes your feedback on the preliminary findings.

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# **Flora and Fauna**



Project EnergyConnect is a landmark infrastructure project that will deliver the first new electricity interconnector between Australian states in 15 years. An electricity interconnector is a connection that allows power to flow between regions in the National Electricity Market (NEM), providing access to a larger number of renewable electricity generators.

Project EnergyConnect, in South Australia, traverses a range of landscapes and vegetation types, from cleared farmland and bluebush plains to large tracts of mallee woodland.

Some of the vegetation types present, particularly the extensive areas of old growth mallee on Taylorville and Calperum Stations, which are skirted by the proposed route, provide important habitat for species such as the nationally Endangered Black-eared Miner bird and the nationally Vulnerable Mallee fowl.

Minimising clearance of native vegetation has been a main consideration in route selection for the Project. As a result, the proposed route follows existing disturbed corridors as far as possible, in particular the southern boundary of Taylorville and Calperum Stations to avoid core areas of critical habitat for the Black-eared Miner.





# **Flora and Fauna**



### Flora and Fauna Studies

A range of flora and fauna studies have been undertaken by independent specialists for Project EnergyConnect. These studies, along with extensive stakeholder consultation, have played a key part in selecting the route, refining the Project design, and understanding potential impacts. Some of the main studies included:

Vegetation and habitat assessments using the Native Vegetation Council's Bushland Assessment methodology. Ninety-four separate sites were assessed in November 2018, June and October 2019 and January 2021. These assessments involved ecologists collecting data including plant species, vegetation type and condition and fauna habitat. The data was used to assess the type and significance of the vegetation present and will be used to calculate the 'significant environmental benefit' that will be implemented under the Native Vegetation Act 1991 to offset vegetation clearance.

Targeted surveys have also been undertaken for vegetation and habitats of significance (e.g. the Environment Protection and Biodiversity Conservation Act 1999 listed Iron-Grass Natural Temperate Grassland and habitat for the endangered Pygmy Bluetongue Lizard, neither of which were detected on the proposed alignment). A Threatened Mallee Birds survey was undertaken in October 2019 by bird specialists. This involved a field survey at 56 sites during the breeding season in October 2019 where experienced observers walked transects and watched and listened for key threatened species. Call playback was also used to try to prompt a response to detect key threatened species. The study also reviewed existing records and data to assess whether key species were likely to be present or impacted.

A Wetland Birds assessment was undertaken using the large amount of information available from wetland bird surveys and published studies to assess the potential for impact to wetland birds. This focused on assessing potential bird collision with the transmission line near the Riverland wetland complex, which is south of the proposed route for approximately 36 km.





# **Flora and Fauna**



## **Key Preliminary Findings**

#### Flora:

Very few threatened plant species are likely to be present or were detected in surveys. The nationally Endangered Peep Hill Hop-bush was the only threatened plant species found on the alignment (near a known population). This species (or any others detected in pre-construction surveys) can be avoided by tower placement and access track alignment. There are also very limited records for other plant species of conservation significance (e.g. two State Rare species, Mallee Bitter-pea and Rohrlach's Bluebush).

#### Mallee birds:

The proposed route avoids areas of dense mallee habitat in the central part of the alignment which have records of Black-eared Miner from the last 20 years (including several records from the Threatened Mallee Birds study). Based on the study, specialists concluded that the Project is unlikely to lead to unacceptable increased impacts to threatened mallee birds.

#### Wetland birds:

The wetland birds assessment concluded that the likelihood of bird collision with a transmission line is relatively low, particularly with mitigation measures such as bird diverters on conductors. Any potential impacts to individual species are not significant when overall population numbers are considered.

#### **Disturbance:**

Other potential impacts such as habitat fragmentation, weed spread, hybridisation, fire risk and disturbance during construction are assessed in the EIS. The potential impacts have been mitigated by selecting a route that follows existing disturbances such as transmission lines and tracks, and can be effectively managed during construction.

#### Impacts can be further mitigated:

Further survey work will be undertaken during detailed design, including on-ground ecological inspection and micro-siting of proposed tower and access track locations to ensure that there are no unacceptable impacts.

The Project EnergyConnect team is confident that with the route selected and the management measures proposed, there will be no significant impact to flora and fauna.

Further detail on the potential impacts and proposed mitigation measures will be contained in the Environmental Impact Statement (EIS) which is currently being concluded and will be on public exhibition soon. In the interim, ElectraNet welcomes your feedback on the preliminary findings.

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## ElectraNet

# **Noise and Vibration**



Project EnergyConnect is a landmark infrastructure project that will deliver the first new electricity interconnector between Australian states in 15 years. An electricity interconnector is a connection that allows power to flow between regions in the National Electricity Market (NEM), providing access to a larger number of renewable electricity generators.

Project EnergyConnect traverses a relatively sparsely populated part of South Australia. The route selection process sought to choose a location for the Project that avoids towns, residences, scenic tourism locations and conservation areas where possible. The noise environment in the area is primarily associated with existing road noise and noise associated with agricultural activities.

# Signation Studies

A specialist noise assessment has been undertaken for the Project to better understand potential noise impacts to people and animals within the broader Project area. This study was based on industry guidelines and standards and involved baseline noise monitoring at locations representative of the ambient noise environment at the nearest residences and the surrounding area. Noise modelling was undertaken to predict the potential noise levels for both construction and operation of the proposed Project.

## **Preliminary Findings**

# Noise levels at residences during construction:

Residences are located predominantly at the eastern end of the transmission line alignment in Cooltong, with a handful of scattered rural homesteads also situated along the route. Audible levels of noise will be produced by the Project due to helicopters, materials transport and the equipment used during construction, however, this noise will be short term, transient and meet Project guidelines. Noise management measures and ongoing stakeholder engagement (particularly with residents close to the proposed alignment) will be implemented.

#### Vibration during construction:

Vibration from construction equipment is detectable only at close range and will not impact on nearby residences.

## Noise levels and local fuana during construction:

Fauna of conservation significance occurs along the transmission line alignment, particularly in the eastern section. Noise and vibration from construction activities, including the use of helicopters, is unlikely to harm fauna.

#### Noise levels at residences during operation:

The Bundey Substation (near Robertstown) will not be audible from any residences. Corona discharge events (potential crackling noise from transmission lines) during operations are not expected to create noise impacts that could affect residences or fauna.

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# **Visual Amenity**



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Project EnergyConnect proposes to use steel lattice towers for the transmission line in South Australia. These structures will be approximately 65m-high and typically spaced between 400m and 600m. Project EnergyConnect traverses several landscape types from cleared grazing land to extensive mallee woodland with low population densities. Given these landscape types, the proposed towers will be a dominant feature. Potential visual impacts have largely been mitigated through a detailed route selection process which avoids towns, residences and scenic tourism locations where possible, and aligns the Project with existing transmission infrastructure and other disturbed areas.



## Visual Impact Studies

A specialist assessment of the Project's visual impacts was carried out in two phases.

#### **Phase One**

The first phase was a desktop assessment which included:

- Calculating the 'Theoretical Zone of Visual Influence' (TZVI). The TZVI is calculated to understand the visual impacts of the presence of the transmission line on people or locations in the area around the Project
- Describing the existing visual landscapes and identifying residential receptors
- Determining the key visual elements of the Project for visual impact modelling.

Once the TZVI was determined, this fed into the route selection and stakeholder engagement processes.

#### Phase Two

- Development of photomontages at visually sensitive locations identified within the TZVI.
- Photomontages provide a variety of views towards the Project infrastructure in different landscapes so potential impacts may be better understood.



# **Visual Amenity**



## **Preliminary Findings**



### IO리앤 Town centres and residential views:

Modelling of Project infrastructure shows that the vast majority of people within the TZVI will not have views of the transmission lines. The Project will not be visible from Morgan, Cadell, Renmark or anywhere along the River Murray. Residents to the east of Robertstown may observe Project elements in the distance but these views will not be dominated by the Project. Cooltong will likely experience a higher degree of visual impact however, this will be mitigated by the presence of existing electricity distribution infrastructure, and vegetation shielding in the vicinity of most properties.

Photomontage along Wentworth Road

## / I \ Road user views:

Project views from major and minor roads within the TZVI will be possible for short sections of a journey. Impacts at the western end of the Project will be mitigated by the presence of existing transmission infrastructure and the transient and short duration of the views. The transmission line will be a dominant feature along Wentworth Road.

## Tourism areas views:

Project views will not be possible from the River Murray, or its immediate surrounds due to topographic barriers and vegetation shielding preventing views to the north. The transmission line will run on the southern boundaries of Calperum and Taylorville Stations which are currently partially cleared by access tracks and have low visitor numbers at these locations, reducing overall impact.

Further detail on the potential impacts and proposed mitigation measures will be contained in the Environmental Impact Statement (EIS) which is currently being concluded and will be on public exhibition soon. In the interim, ElectraNet welcomes your feedback on the preliminary findings.

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