



Environmental assessments at Stockyard Hill



# STOCKYARD HILL WIND FARM TERMINAL STATION PLANNING PERMIT APPLICATION SUMMARY

October 2012

Origin is seeking planning approval for a terminal station to feed electricity generated by the proposed Stockyard Hill Wind Farm into the national electricity grid.

The proposed location for the terminal station places the facility near existing electrical infrastructure – at the crossover point of the 220 kV Terang-Ballarat and the 500 kV Moorabool-Heywood powerlines, south of Lismore (shown in Figure 1).

The current proposal is different to the previously approved terminal station proposal (near Berrybank, approved on 26 October 2010). The current proposal is a result of a revised network connection strategy resulting from the reduction of turbine numbers from 242 to 157, and advice from the Australian Energy Market Operator that terminal stations should wherever possible be located in areas that provide greater flexibility for the future development of the transmission network.

This guide has been prepared to provide a summary of the planning application for the proposed terminal station. It outlines the overall proposal, studies completed to support the planning application, consultation completed to date and opportunities for stakeholders to have a say during the planning application assessment period.

## The Terminal Station

The proposed terminal station location (shown in Figure 1) will allow the transmission line from the wind farm to connect to the national electricity grid via the 500 kV Moorabool to Heywood transmission line, which runs across the proposed terminal station site. The site is approximately 5-6 km south of Lismore, adjacent to Lower Darlington Road within the Corangamite Shire Council.

The terminal station and associated infrastructure will occupy approximately 4% of the total landholding. It is anticipated that up to 5 hectares will be temporarily utilised during construction.

The terminal station construction site will be separated from the remainder of the land by fencing, which will allow for continued use for agricultural purposes.



Figure 1. Proposed terminal station location near the crossover of the 500 kV and 220 kV powerlines (powerlines shown in blue, Terminal station site shown as green triangle)

The terminal station will include:

- a 500 kV switchyard located to the north of two existing 500 kV lattice structures
- four additional lattice structures to turn the 500 kV lines into the 500 kV switchyard
- a 132 kV/500 kV substation located on the eastern side of the 500 kV switchyard
- control rooms, one for the 500 kV switchyard and one for the 132 kV/500 kV substation
- access from Lower Darlington Road, including upgraded existing entry and onsite car parking
- emergency exit to Smiths Road
- site screening – tree planting, and
- temporary construction facilities that will be removed after construction is complete.

It is estimated that the terminal station will take in the order of 18 months to construct, with an anticipated start date of September 2013, and commissioning occurring in March 2015.

### Environmental and Planning Assessments and Approvals Process

The location and design of the proposed terminal station takes into consideration the position of existing high voltage lines, proximity to the crossover point of the 220 kV and 500 kV lines and existing features and conditions of the proposed site. The site selection and design process involved consideration of a range of matters including access to main roads, zoning and overlay controls, land ownership, avoiding the need for native vegetation removal, protection of fauna, ensuring compliance with relevant environmental standards, avoiding areas of cultural heritage significance and minimising the impact of ongoing agricultural practices.

A range of technical reports have been prepared for the terminal station to assess potential environmental aspects and mitigation measures. These have been summarised in or lodged with the planning application that will be made available to the public by Corangamite Shire Council.

These reports have confirmed that the proposed site is suitable for the terminal station and is consistent with national, state and local planning and environmental policies. The findings of these reports are briefly outlined below.

#### Noise

Acoustic specialists Sonus undertook an assessment of the potential noise impacts associated with the proposed terminal station. This assessment identified that the relevant acoustic requirements will be met at all nearby dwellings.

#### Flora and Fauna

The Flora and Fauna assessment undertaken by Ecology and Heritage Partners demonstrates that the proposed terminal station (and land required for construction) lies within already-cleared and cultivated land that lacks habitat for indigenous flora and fauna. Construction of the terminal station will therefore not result in any significant impacts on native flora and fauna. Fauna habitats on the proposed terminal station site are not considered to be suitable for species other than highly adaptable native bird species common to farmland settings throughout south eastern Australia. No rare or threatened species of fauna are considered likely to occur at the terminal station site due to the highly modified nature of the habitat.

#### Heritage

A Cultural Heritage Management Plan has been prepared and lodged with Aboriginal Affairs Victoria in accordance with the Aboriginal Heritage Act 2006. The plan will ensure that

the terminal station will not impact on any non-Aboriginal sites, Aboriginal sites or areas of Aboriginal cultural heritage significance.

#### Land Use

The proposed terminal station will occupy a portion of the southern part of the existing agricultural landholding and allows the remainder of the land to continue to be used for agricultural purposes. The proposed terminal station will not adversely impact on the agricultural use of surrounding land. The proposed site has not been identified as significant in a regional or local context.

#### Traffic and transport

Construction of the proposed terminal station will have a temporary impact on the surrounding road network and minimal impact once the terminal station is operational. A Traffic Assessment and Framework Management Plan has been prepared in consultation with VicRoads and Corangamite Shire Council to ensure that adverse affects on traffic in the locality are minimised.

#### Landscape and visual impact

In relation to landmarks, views and vistas, the assessment identifies that the landscape surrounding the site is considered to have a low sensitivity and is capable of visually absorbing the terminal station and limiting its impact. Therefore, the site is considered a suitable landscape for the construction of the terminal station. Vegetation is to be planted within the surrounds of the terminal station to further reduce views of the facility within the surrounding area.

#### Geotechnical

The geological setting is favourable in terms of interaction between the soil and rock mass and groundwater regime. Foundations will have no impact on underground water bodies and/or groundwater. Once operational, the small amount of waste water generated will be treated on-site using an appropriate treatment plant and similarly will have minimal impact on underground water bodies and/or groundwater. Larger volumes of waste water may be produced during construction will be contained in portable storage and progressively removed from the site.

#### Consultation

Initial consultation regarding the proposed terminal station focused on engagement with State and Local Government agency stakeholders. These stakeholders assisted in the identification and review of areas appropriate for further investigation of a 132 kV powerline route and terminal station site.

Origin has sought to engage directly with all residents within close proximity of the proposed facility.

Following submission of the planning application to the Corangamite Shire Council the broader community will also have the opportunity to submit their views to decision makers. The Council will invite comment from interested parties via an advertisement, at which point it is anticipated that those parties will have an opportunity to submit their views to the Council.

The Corangamite Shire Council can be contacted on 03 5593 7100 or via the Freecall Number for Skipton Residents on 1800 819 732.

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**FOR MORE INFORMATION VISIT  
WWW.STOCKYARDHILLWINDFARM.COM.AU  
OR CALL OUR PROJECT HOTLINE  
ON 1800 753 730**

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