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 avoided 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.

Noise and Vibration Studies

A specialist noise assessment was 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.

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.



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.



Vibration during construction

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



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.



