

Taralga Wind Farm Development
Landscape Visual Assessment

Prepared for Department of Infrastructure, Planning and Natural Resources
14 July 2005
Revision B



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The aim of this report is to provide a visual impact assessment of a proposed wind farm development near Taralga, N.S.W. The proposed development includes 62 wind towers that would be sited on a series of hills and ridge tops east of the town of Taralga. The fixed towers are each 65m high. Including the blade sweep they are 110m above ground level. The proposed development also includes associated infrastructure.

This report uses a methodology that relies on a quantitative evaluation of visual effect, and a qualitative assessment of viewer sensitivity to provide a visual impact assessment. A representation of viewing points from within the visual catchment of the proposed development is used to provide typical examples of the visual impact. Of these viewpoints, four are located in the public domain, and four are located in private properties within 2 km of the proposed development. In arriving at the conclusion of visual impact, this report does not address viewer preference for the aesthetic qualities of the wind towers.

The findings of this report are as follows. On a 5 point scale, the potential visual impact from the public viewing places is considered to be in the middle of the range. The public viewing places are considered to have a high level of sensitivity. From the private property viewpoints, the potential visual effect is considered to be in the higher range, but visual sensitivity is low.

As a result of this assessment we are of the opinion that the potential impact of the proposed development is unacceptable. The reasons for the unacceptability of the proposed development are:

- The existing landscape has a visual character of high quality based on the dominance of natural and rural qualities of pastoral landscape and bushland. The high number of wind towers in the proposed development will alter this character significantly because it will dominate the natural and rural qualities.
- The visual catchment of the area surrounding Taralga has a very distinct boundary: about 10km to the east and about 5km to the west the boundary is defined by vegetated ridgelines which are highly visible from the village and the surrounding landscape. The proposed development is extensive along the horizon of the eastern ridgelines, and will thus dominate the visual character of the ridgelines.
- The landscape in the zone of visual influence has relief of 40-50m. Trees are 15-20m high. Built form is mostly single storey. Due to the size of the towers and their blade sweep, compared to the scale of other landscape elements, there is little opportunity for the proposed development to be absorbed within the visual landscape.
- The proposed development, both in part and in full, will be visible by a reasonable number of highly sensitive viewers, being the people of Taralga, tourists and rural property owners in the areas surrounding the proposed development.

Mitigation strategies such as design of the turbines, screening and modifications to the proposal were considered as part of this report. It is concluded that local screening of potential views of the wind farm is a possible mitigation measure, but is unlikely to significantly affect the visual impact. This study finds that only by reducing the number of towers will the visual impact of the proposal be acceptable within the methodology adopted by this report. An alternative scheme involving 32 towers, rather than 62, is assessed in this report and is considered to be acceptable as it would not dominate the landscape, and would have a limited impact on the horizontal extent of the ridgeline.

It is recognised that visual assessment forms only part of the environmental impact assessment process for the proposed development. Therefore it is recommended that, given that impacts are generally considered to be moderate to high, the conclusions of this report should be considered in the greater context of the project and its aims for providing a renewable energy resource and other impacts that the proposed development may have.

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This report provides a visual impact assessment of a proposed wind farm development at Taralga, N.S.W.. The report has been prepared by HASSELL for the Department of Infrastructure, Planning and Natural Resources (DIPNR) and forms part of the Environmental Impact Assessment process being undertaken for the proposed development. The proposed development includes 62 wind towers that would be sited on a series of hills and ridge tops east of the town of Taralga. The fixed towers are each 65m high, and including the blade sweep, are 110m above ground level. The proposed development also includes associated infrastructure.

The study area for this report includes all areas from which the turbines are visible (also known as the Zone of Visual Influence as mapped out in Appendix H).

An Environmental Impact Statement (EIS) for the proposed development was prepared by Geolyse on behalf of the proponent and submitted to Upper Lachlan Shire Council in November 2004. The Minister for Infrastructure and Planning called in the development as State Significant Development in December 2004. The EIS included a visual impact assessment. In response to the EIS, a number of submissions were made to DIPNR raising key issues regarding the visual impact. This report has been commissioned to provide another assessment of visual quality impact.

The purpose of this report is to provide

- an assessment of the existing landscape and visual character
- an assessment of the visual quality impact
- an assessment of the acceptability of the visual quality impact
- an assessment of measures that may be considered to mitigate the visual impact

The assessment of the landscape and visual character relates to the broad scale landscape context of the area surrounding the proposed development. It involves a description of the existing landscape and an assessment of its important qualities. This forms the basis for the evaluation of the visual assessment. The assessment of visual impact and its acceptability relates to the potential change to the landscape character as a result of the proposed development.

In assessing the project, mitigation strategies have been considered. Mitigation strategies include the potential for minimising visual impact by altering the extent and scope of the proposed development.

Appended to this report are HASSELL's comments on the visual impact assessment prepared by Geolyse and review of the key issues raised in submissions responding to the EIS.

This report is prepared with reference to:

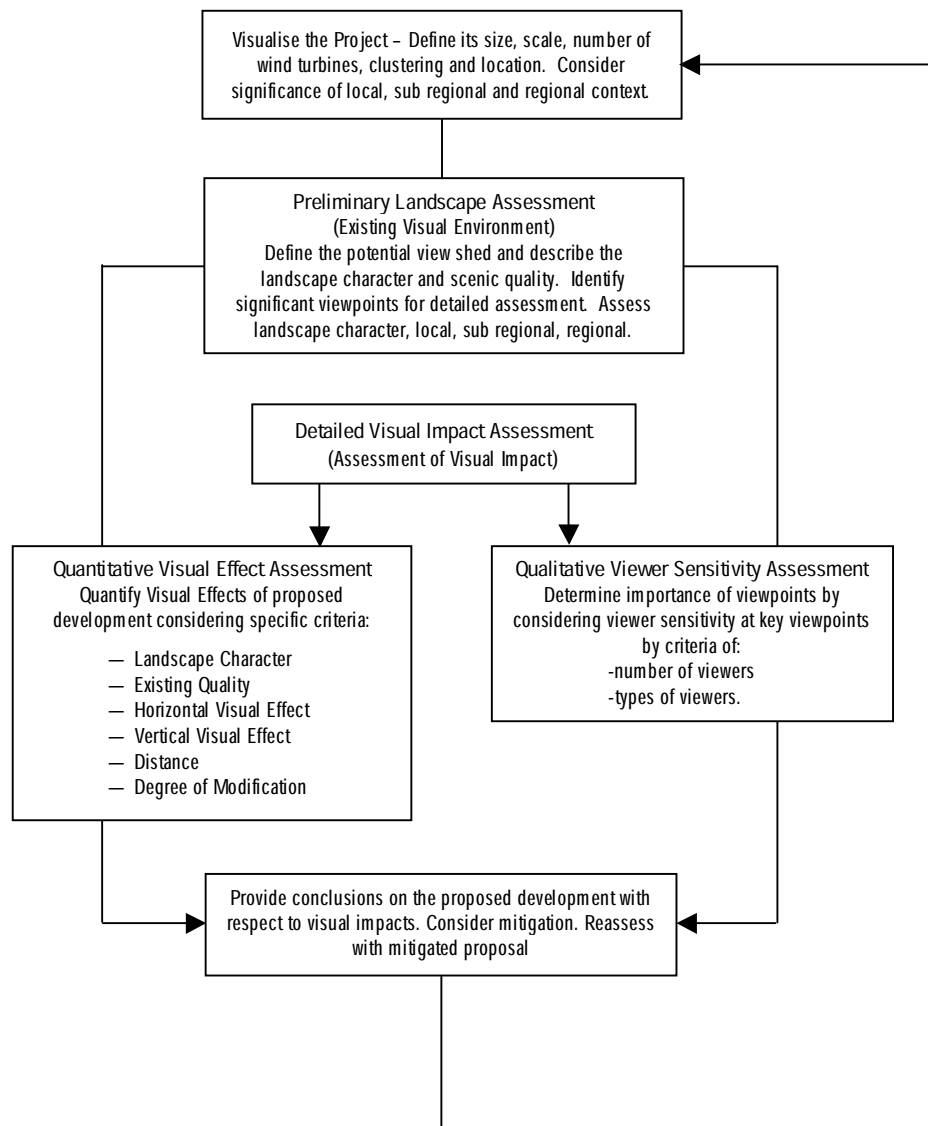
- Best Practice Guidelines for Implementation of Wind Energy Projects in Australia, Australian Wind Energy Association (March 2002)
- Wind Farms and Landscape Values - Draft Issues Paper, Australian Wind Energy Association and Australian Council of National Trusts (May 2004)
- Environmental Impact Statement – Taralga Wind Farm, Geolyse (November 2004)
- A Planning Framework for Natural Ecosystems of the ACT and NSW Southern Tablelands – Environment ACT (<http://incp.environment.act.gov.au/planningframework/index.aspx>)
- Wind Farms Planning Bulletin (2002)

01 Introduction

The assessment team includes personnel with substantial experience in visual assessment. Team leader Martin Bryant has been responsible for undertaking many visual assessments for Environmental Impact Statements and Reviews of Environmental Factor, and in statements of evidence to the Land and Environment Court as a court appointed expert. Warwick Keates has extensive experience in visual assessment of wind farms, and has been responsible for creating the HASSELL matrix that is now recognised by Planning SA and the South Australian Department of Environment and Heritage. Cathy Challinor, a landscape architect with experience in visual assessment, is the third team member.

2.1 Detailed Visual Site Assessment Process

The assessment methodology adopted by HASSELL draws reference from the "Best Practice Guidelines", Australian Wind Energy Association (2004) and is illustrated below.



2.2 Detailed Visual Impact Assessment

Assessment of the visual impact of the proposed development has been undertaken in two parts as indicated in the previous table. Visual effect is measured through a quantitative assessment according to specific criteria. Visual sensitivity is considered on a qualitative basis.

Visual Effect

The assessment of the visual effect on the surrounding environment is undertaken using the HASSELL matrix (refer Appendix E) and photomontages of the proposed wind farm development to simulate the appearance in the landscape. The photomontages used in the assessment were provided by the Development Applicant, RES Southern Cross. The montages are considered to be reasonably accurate and representative of the type and scale of visual impact that will be experienced in a number of similar locations across the study area.

The assessment methodology has been developed with detailed reference to other visual assessment criteria being used within Australia and worldwide. To provide an understanding of the overall visual effect of the wind farm on the existing landscape, the following five criteria are used to quantify the visual effect from specific key viewpoints:

- 1 Existing landscape visual character (current land use and character).
- 2 Degree of visual modification (percentage amount of change and ability of landscape to absorb change).
- 3 Vertical visual effect (height of the development in the active landscape).
- 4 Horizontal visual effect (spread of the development in the landscape).
- 5 Distance of visual effect (distance between viewpoint and development).

Each of the aspects is rated out of 5, with the scores combining to provide an indication of the accumulative visual effect from each of the selected viewpoints. The accumulative visual effect is then considered in a five-point scale

- Severe (5)
- Substantial (4)
- Moderate (3)
- Slight (2)
- Negligible (1)

Visual Sensitivity

Visual sensitivity is important to establish the level of significance of the visual impact.

The level of sensitivity of the viewer should be based on community values and personal preference. AUSWEA's Best Practice Guidelines for Wind Energy Projects (p24) state that 'visual amenity must always be considered... with an appreciation of the value that the local community put on rural character and landscape attributes'. The EIS did not undertake a study to establish viewer preference of the local community for the proposed development, but it did provide a petition, which stated that some of the community support the principle of wind farms. It is clear from submissions received after the exhibition of

the EIS that there is a proportion of the community whose opinion is that wind towers are unsightly and who place high values on the existing natural landscape. There may be an equal proportion of the community who consider the wind towers not unsightly, but this has not been documented.

In the absence of a true understanding of local community values, some critical analysis can be applied to the number of viewers and types of viewers that are affected to establish visual sensitivity. The significance of the visual impact of the proposed wind farm development can be said to increase according to the number of viewers or potential viewers. This means that along a busy road, or in the village, the number of viewers would be high, and therefore the level of visual impact of the development could be said to be significant. The individual viewers' sensitivity may vary also according to the type of viewer, depending on whether the viewpoint is from a home, or from a tourist road or stopping point, or from a work place.

An assessment of likely viewer sensitivity at the representative viewpoints is undertaken as part of the methodology, and considered in terms of the following.

- The number of potential viewers. The significance of visual sensitivity is likely to increase with the likely number of viewers. When the visual effect is likely to impact most of the population of Taralga the significance of the sensitivity is considered to be substantial. When the visual effect is likely to impact a small number of local residents the significance is considered to be slight.
- The types of viewers and their likely sensitivity. Visual sensitivity can be partly determined by whether affected views would be experienced by residents, tourists or by motorists, and whether the impacted views would be experienced from the living rooms, work places, vehicles etc. Significant sensitivity may also arise if views to or from heritage places are affected. When the visual effect is likely to impact residents or tourists, or would impact views from living spaces, or heritage places, the significance of the sensitivity is considered to be substantial. When the visual effect is likely to impact commuter motorists or workers, the assessment is considered to be slight. If it affects motoring tourists who experienced dynamic views from a travelling vehicle, then the significance would be moderate.

Conclusions on visual impact

In determining the overall impact from representative viewpoints, this assessment considers both visual effect and sensitivity. The assessment places a greater weight on the visual effects from areas with higher sensitivity. For example where the visual effect is moderate or greater, and the visual sensitivity is considered to be substantial, then the visual impact of the proposed development is considered to be unacceptable.

In weighing up the assessments of visual effect and visual sensitivity, the conclusions rely on the opinions of the authors and their training and experience in visual impact assessment.

2.3 Field Work Study

The landscape assessment of the existing visual environment is evaluated through a process of detailed on-site investigations. These investigations were undertaken on 21 March 2005, during moderate weather conditions, low cloud, with periods of sunshine. General visibility was clear, with an average temperature of 15°C. An assessment was carried out in order to describe the surrounding landscape characters. Specific character areas and the visual effect are also described to provide a complete evaluation of the existing visual environment.



03 Existing Landscape Character Assessment

3.1 Context

The site for the proposed wind farm is located close to the village of Taralga, north of Goulburn in the Southern Tablelands of New South Wales, with a population of approximately 380. The proposed site is located on predominantly pastoral land where the closest towns are Crookwell, 38km to the east, and Goulburn, 40km to the south.

The surrounding landscape includes the Tarlo River National Park and the Cookbundoon Range to the south, and the Wombeyan Karst Conservation Reserve to the northeast. These areas contain dense forest. The village of Taralga was established in 1819 and has many restored and well-preserved historic buildings.



Figure 1: Location Plan

03 Existing Landscape Character Assessment

3.2 Land Form and Vegetation

The geology for the Taralga region is made up of basalts that support rich soil with grassland and scattered trees in an undulating topography of rolling hills. The rolling hills are evident on the site of the proposed development and to the west of the proposed development site where they form rounded peaks between meandering creek lines. Variations in relief of 40-50m occur across the study area. To the east there is sandstone geology with topography of long ridgelines, steep side slopes and deep gullies. This landform gives better drainage and results in taller vegetation, but is less suited to grazing. The proposed wind farm development site is located at the eastern edge of the basalt geology and undulating landform near the sandstone ridges to the east.

The original landscape in the regional area of Marulan and Goulburn included dry forest Box-Gum Woodlands and Grasslands that have been mainly modified or cleared by human activity since 1850. In the areas local to Taralga the original vegetation types of Grasslands, Grassland – Woodland Mosaic, and Box Gum Woodlands have been mainly cleared or modified by activities of grazing, human settlement and minor transport corridors (Planning Framework for Natural Ecosystems of the ACT and NSW Southern Tablelands). Trees in the Woodlands are up to 20m in height.

3.3 Land Use

The geology, landform and soils of the area have influenced the land use patterns in the agricultural landscape. The broad scale context of the area is used for primary production, predominantly pastoral grazing land for cattle and sheep. Although the original woodlands have been largely cleared or modified, scattered remnant vegetation and introduced plantings occur across the landscape and are often associated with dwellings, urban uses and creek lines. To the east of Taralga the forests in the sandstone areas are generally intact, especially along the ridgelines. The village of Taralga consists of low-density detached housing, with many traditional stone buildings. Local and regional road connections are also part of the landscape, ranging from sealed 2 lane roads to single lane gravel access tracks.



3.4 Landscape Visual Character

The Suggested Methodology for Landscape Assessment recommends that the existing visual environment be evaluated within the context of local (0-5 km), sub regional (1-5 km) and regional (> 5 km) landscape character. As the proposed development site covers an area of over 10km, the local character is consistent with that of the sub regional character and therefore is discussed in this category in this report.

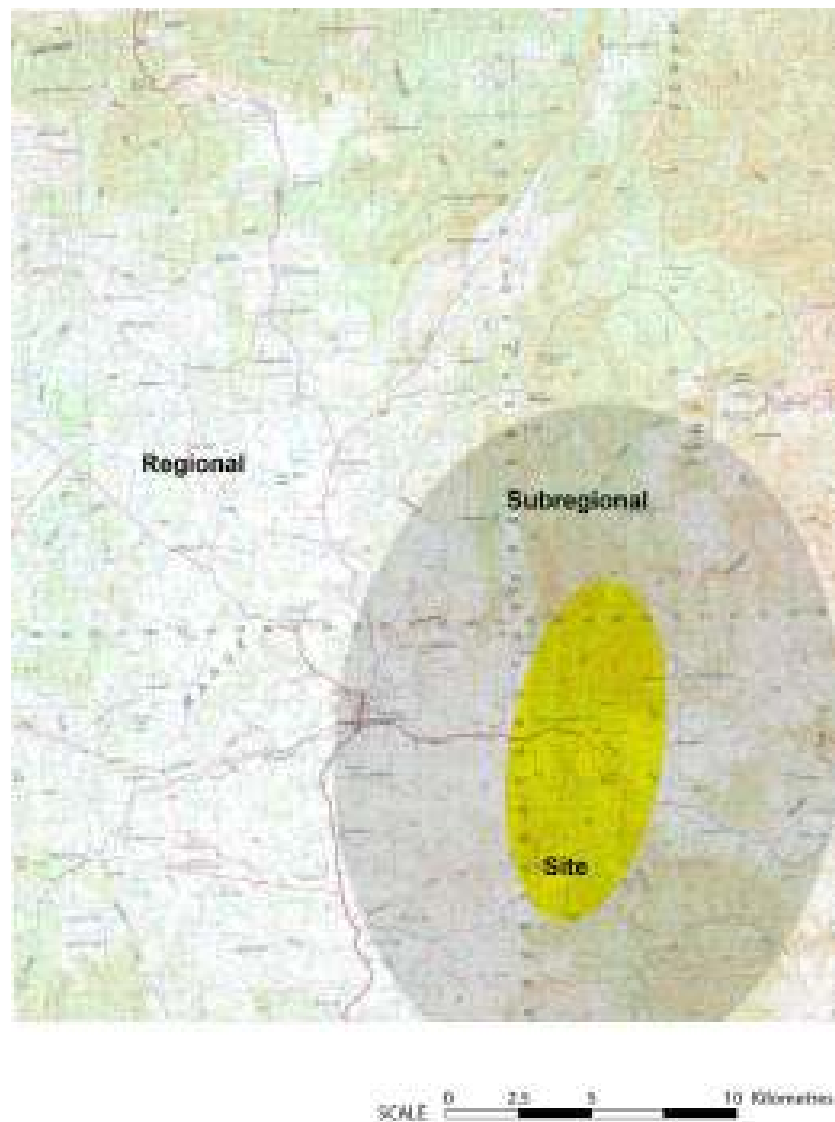


Figure 2 Visual Character Areas

3.5 Regional Visual Character

The regional landscape character surrounding the site is defined by the surrounding topography of the Great Dividing Range and the plateaux, ridgelines, hills, creeks and variety in vegetation features.

The regional landscapes can be considered as two distinct character areas, divided by a series of ridgelines and hills that run north south near the centre of the proposed development site. To the east the landscape is strongly associated with the natural landscape of the Great Dividing Range. Native woodland is the dominant vegetation type, with few modified areas of cleared land for agriculture. The topography is steep with deeply incised creeks. Ridges create a relative height variation in excess of 100m. The land cover is natural vegetation is similar in character to the native vegetation found in the Blue Mountain and Tarlo River National Parks. Overall, the landscape character is natural with a dramatic topographical and visual character.

At the proposed development site itself and to the west, the landscape is typical of the Southern Highlands which is characterised by a more undulating landform with minor topographical features, and moderate relief. Numerous creeks and low ridges meander through localised plateaux, hills and basins, creating a visually diverse landscape. The vegetation relates to a rural land use associated with pastoral operations.

3.6 Sub Regional Visual Character

As with the regional landscape character, the sub regional is defined by the ridgelines that run north south marking the transition between the steeper parts of the Great Dividing Range and the rolling hills of the Southern Highlands with its pastoral areas that surround Taralga. The sub region has a number of specific landscape areas that add to the overall landscape character.

3.7 Specific Sub regional Landscape Areas

Taralga Village

The landscape character of the Taralga village is defined by a wide main street flanked by single storey stone and brick dwellings, typical of the basalt construction of the high country area. A triple avenue of Poplars marks the main street which runs north-south. The village extends 1 kilometre by 1 kilometre and has an east-facing aspect. The north and south ends are on the rise of small hills. The centre of the main street is within a low-lying basin associated with Corroboree Creek. The main street includes housing and shops. The village extends two street blocks to the east and west. Most of the development on the side streets is detached housing at low density.

The character of the village is a low scale rural village settlement in a predominantly natural landscape. It does not dominate the landscape. From most places in the village there are expansive views between buildings of the scenery to the east and west.

There are ridgelines or strings of hills that run north to south beyond the town which define the visual envelope for viewers in the village. East, the low-lying landscape provides extensive views to a series of ridgelines set approximately 5-10km from the main street. These ridgelines are the proposed development site.

Surrounds of Taralga - Goulburn Road, Alders and Crees Road, Quiggs Road, Stonequarry Cemetery

The physical landform surrounding Taralga is undulating. The landscape is open with limited tree cover or vegetated ridges. Along creek lines and at special places like Stonequarry Cemetery, the native vegetation is interspersed with exotic trees (Willow and Poplar species). The land use is agricultural with pastoral activities, interspersed with areas of woodland and farm holdings.

The relationship of topography and land use creates a visually open aspect with panoramic views into and out of the site of the proposed development. Topographical features such as Bannaby Hill and Corroboree Hill form prominent visual elements within the sub regional landscape. These are contrasted by Meadow Creek, Corroboree Creek and Woolshed Creek that weave through the landscape to the west of the proposed development site as well as in the foreground of views from Taralga to the proposed development site.

The overall character is a low-lying undulating, open landscape with a defined visual envelope created by the surrounding ridgelines.

The eastern ridgeline - Bannaby Hill, Omaru

The landscape character around Bannaby Hill and Omaru marks a change in landform, vegetation and land cover from that of the surrounds of Taralga. This area is a transitional landscape between the undulating landform and open grasslands to the west and densely wooded escarpments forming a natural/endemic landscape character to the east. This transition further reinforces the significance of the ridge as a visual and physical edge to the landscape character of the Taralga area.

The landscape character surrounding Omaru is typical of this area. It is visually enclosed, with significant ridgelines in all directions. This area is typical of the landscape character that exists along the eastern ridgelines of the proposed development site. The overall landscape character is a mixture of pastoral to the west with native vegetation to distant ridgelines to the east.

3.8 Existing Visual Environment

The existing visual environment is dominated by north-south ridgelines on which the wind farm would be located. To the east the visual and physical character is natural, with steep topography and native vegetation. The landscape character transitions along the line of the proposed development site. West, the topography becomes more undulating with a land use of grazing and other pastoral activities. The visual character is more open and the panoramic views of the agricultural landscape are typical of the visual environment.

3.9 Zone of Visual Influence

The anticipated zone of visual influence (ZVI) for Taralga Wind Farm is illustrated in Appendix H. This map quantifies the extent to which the turbines will be seen from within the wider landscape. It should, however, be noted that zones of visual influence maps provide a worse case scenario, as they do not include features such as vegetation and buildings that might screen turbines. The ZVI clearly illustrates the interrelationship of the dominant north-south ridgelines and the potential visual impact.

To the east the extent of visual effect is limited by varied topography and vegetation to within 5 km of the development site. In contrast, to the west the potential for visual impact is greater. The undulating topography and low-lying nature of the landscape creates a more open visual character that results in a larger ZVI. The lack of vegetation further compounds this situation. For the purpose of this study, and as generally accepted in studies of this type, the ZVI beyond 10km is considered negligible, as the turbines would be insignificant in any view composition.

04 Development Site and Turbine Layout

The wind farm site would be located on elevated landform at a transition in the landscape between the undulating landform of the pastoral landscape and the steeper ridges to the east. The development site is generally open in character, with visual indicators of the cultural overlay of farming and settlement. These include sealed and gravel roads and tracks, post and wire fencing, residential and farm dwellings as well as pockets of exotic vegetation. Existing wind anemometer tower structures are located in the local area that act as reference points in the landscape, and also provide a measuring reference point for the proposed development.

The Taralga wind farm would be visible from a significant number of viewpoints in both public and private land. The relationship of topography and generally open landscape means that views are framed and defined by the series of ridges, where the locations for the turbines are proposed.



04 Development Site and Turbine Layout

The proposed layout of the turbines is in a generally north – south direction. The turbine locations span approximately 10km north-south, and up to 4km in width, and are arranged in rows on a series of ridges that will create a layered effect in the landscape with no formal pattern to the arrangement.

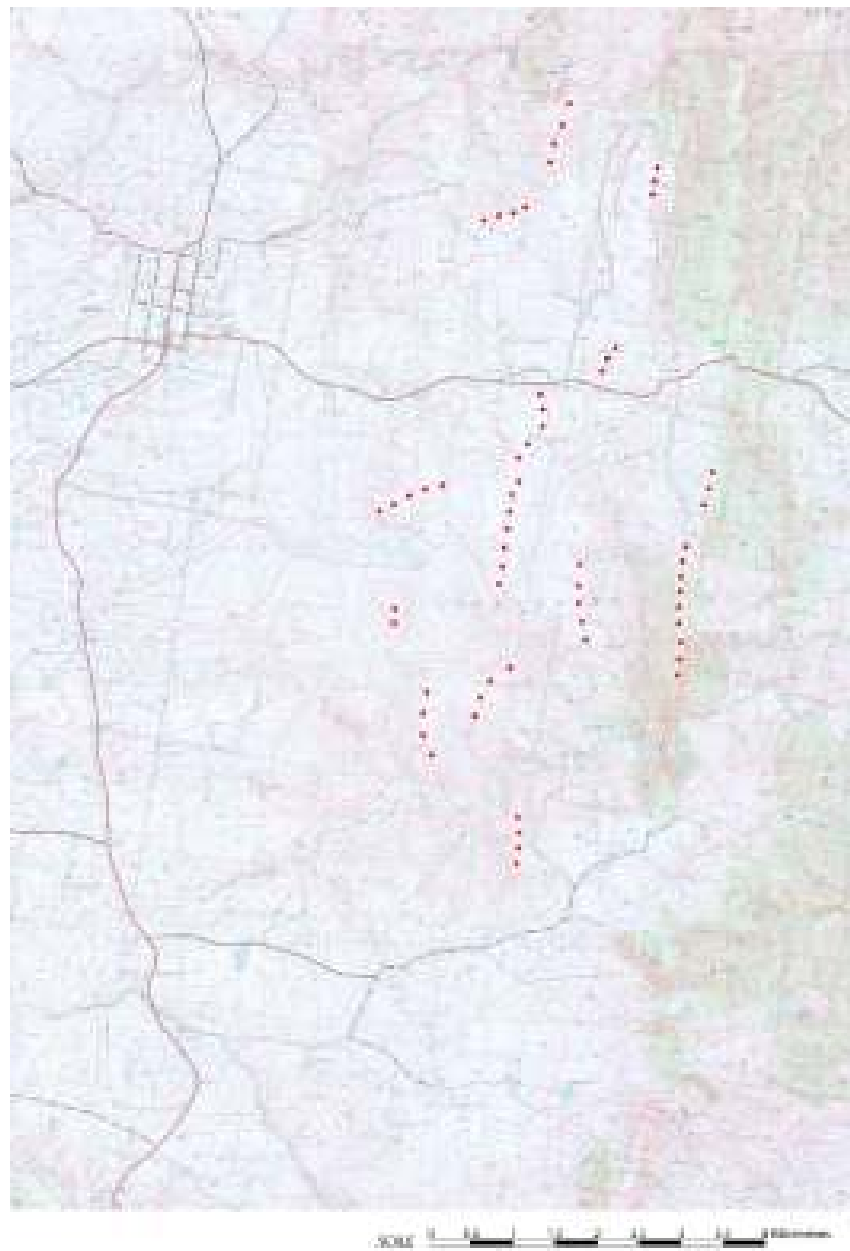


Figure 4: Turbine Layout

The locations of the viewpoints in the EIS, as well as the locations of the additional viewpoints provided by the applicant, were reviewed as part of the visual assessment process. It was established through site inspection and analysis that the combination of these viewpoints provides a good representation of visual impact, given that they include public and private areas as well as views from approach roads and from within the town. The views from these locations are also representative of views from similar areas such as other heritage sites in and around Taralga. While additional viewpoints may be requested by concerned residents they are not likely to provide any further information for the assessment. In undertaking assessments it is important to note that each of these sites represents a series of views from areas near to where the viewpoints have been identified. Accordingly, the assessment considers not only the towers that may be visible from the individual viewpoints, but the towers that would be visible from a range of similar locations near the viewpoint.

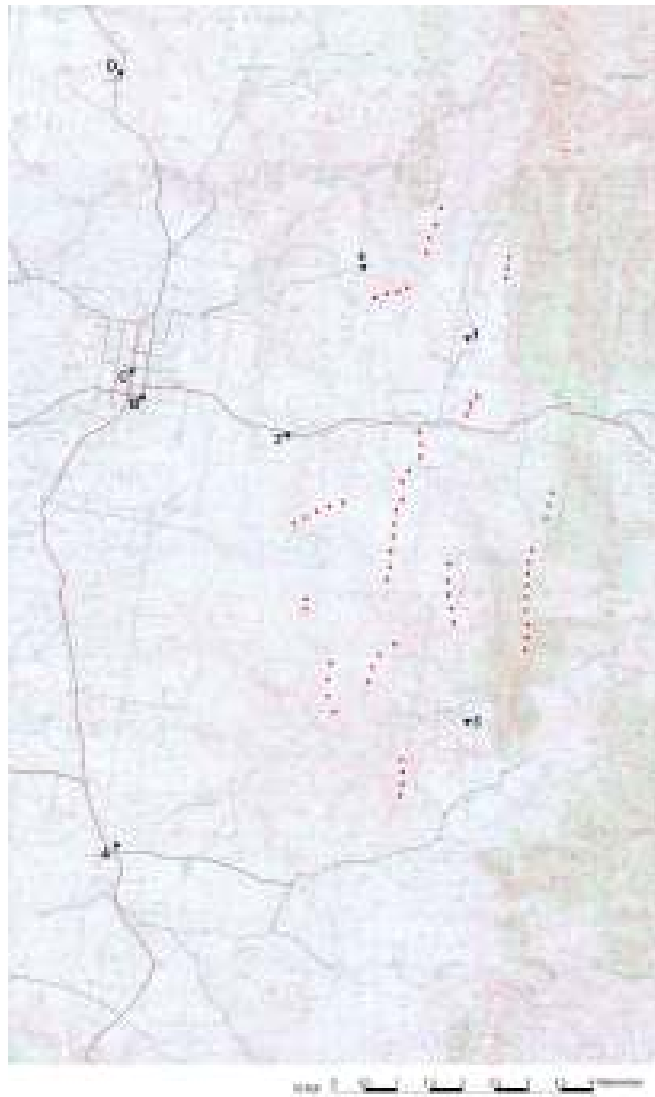


Figure 5: Location of Viewpoints

5.1 Evaluation of Visual impact

The specific visual effect of the proposed wind farm is considered as part of the detailed visual assessment using photomontages, an assessment of similar viewpoints and the HASSELL matrix. The visual effect has been assessed using four viewpoints nominated in the EIS which represent similar viewpoints from near these viewpoints:

(Viewpoint A);

(Viewpoint B);

(Viewpoint C);

(Viewpoint D).

A further four sites were assessed to identify the specific impact from certain residential properties adjacent to the Wind Farm. These are:

Kearns' Property (HO3 in Appendix H of the EIS)

Property off Bannaby Road (HO5 in Appendix H of the EIS)

Ross' Property (H12 in Appendix H of the EIS)

The Farm

At each of these viewpoints consideration was given to views from areas adjoining the house and nearby external areas that would be used by the occupants.

An evaluation of sensitivity is included at each viewpoint.

Finally, two additional viewpoints at the Omaru and Polley Properties were reviewed as part of the site inspection that was undertaken during the site visit on the 21 March 2005. A broad assessment of the visual impact at these properties was also recorded and used to formulate the overall visual impact.

05 Assessment of Visual Impact

Viewpoint A: Intersection of Taralga Road and Hillcrest Road (758632 E 6182119N)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	This view is located at the intersection of Taralga Road and Hillcrest Road, south of Taralga, and is typical of the views of the area along the road. The landscape character is a combination of low lying depressions and ridges to the foreground with rising ridgelines forming a defined visual envelope to the east that allows glimpses to the natural vegetation of the Tarlo River National Park. The landscape character in the foreground is rural with a defined open field structure and little tree or shrub cover. Natural vegetation is visible on the ridges to the east.	3.5
Degree of Visual Modification	The degree of visual modification is described as substantial. The number of turbines visible from this location and layered visual effect would dominate the rural character over a large and highly visible part of the view composition. The low-lying landform of the foreground reduces the potential for screening. The location of the turbines on the dominant ridgelines to the east increase their visual effect, because the source of the visual impact is located on the edge of the visual envelope.	4
Horizontal Visual Effect	The extent of horizontal visual impact is measured as 60 degrees of the panorama. The visual impact is considered to be limited, but will nonetheless be continuous across a reasonable portion of the landscape panorama. The horizontal visual effect increases as the road approaches the town.	2
Vertical Visual Effect	The distance of the viewpoint to the turbines reduces the potential vertical visual impact.	1
Distance of Visual Effect	At a distance of 3.9 km, the visual effect is limited.	2
Visual Effect	Slight increasing to Moderate	12.5

Visual sensitivity

Viewer Group	Due to the location of this viewpoint on the main route to Taralga from Goulburn, as well as being on a nominated tourist route, potential viewers will include tourists, local commuters and residents. It is likely that this viewer group will have a heightened sensitivity to the potential visual impact, as the residents would have an intimate knowledge of their local landscape and the tourists may take extra interest in their surroundings. This location is on a road, and as a result the viewpoint and associated visual impact is dynamic, continually changing along the length of the road, but the dominance of the wind farm in the background would be considerable.	Moderate
Number of Viewers	The numbers of viewers from this location based on site observation and local traffic volume data would be considered to be high in relation to the regional population.	Substantial

O5 Assessment of Visual Impact

Viewpoint B: Bunnaby Street adjacent to The Sacred Heart School (759279 E 6189023 N)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The existing landscape is described as rural. The viewpoint is located to the east side of the main street at the edge of the town on a low-lying ridgeline. The local elevated ridgeline that defines the viewpoint location provides expansive views. Natural vegetation is visible on the ridges to the east.	3.5
Degree of Visual Modification	The turbines form a continual visual element to the horizon line. The location of turbines on the ridgelines to the east limits the potential for the existing landscape to absorb the visual impact. Also, the open pastoral character limits opportunities for screening or the potential for visual absorption. The wind farm will produce a substantial degree of visual modification due to the number of the turbines and extent that the development impacts on the landscape.	4
Horizontal Visual Effect	The location of the viewpoint means the visual effect extends for a significant part of the horizontal field of view. The continuous visual effect is measured as 95 degrees of the horizontal field of view and is described as moderate.	3
Vertical Visual Effect	The vertical visual impact is limited.	1
Distance of Visual Effect	At a distance of 3.1 km, the visual effect of the Wind Farm forms the middle ground of the view with little or no background because they would sit on the ridgelines to the east that define the visual envelope.	2
Visual Effect	Moderate	13.5

Visual Sensitivity

Viewer Group	Due to the location of this viewpoint within Taralga, potential viewers will consist mainly of local residents and visitors to local heritage sites such as the Church. It is likely that this viewer group will have a heightened sensitivity to the potential visual impact, as the residents would have an intimate knowledge of their local landscape. The nature of the viewpoint as a destination may also increase the viewer sensitivity in this location, as the views to the proposed development site may be static rather than viewed from a moving vehicle.	Substantial
Number of Viewers	The number of viewers from this location based on site observation and population figures would be considered to be high in relation to the regional population.	Substantial

O5 Assessment of Visual Impact

Viewpoint C: Goodhew Park off Orchard Road (759063 E 6189430 N)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The open pastoral landscape and the scattered village buildings of Taralga form the existing landscape character. The character is described as rural transition with agricultural and settlement defining the visual character. However, the character of the town is dominated by the surrounding rural landscape.	3
Degree of Visual Modification	The proposed wind farm will dominate the landscape and dilute the inherent rural character. The background, as with many views around Taralga, is defined by the eastern ridgelines. The scale of the wind farm cannot be absorbed by the landscape. The turbines will be seen across the horizon from numerous viewpoints like this in the town.	4
Horizontal Visual Effect	The location of the viewpoint looking east means the visual effect extends for a considerable part of the horizontal field of view. The continuous visual effect is measured as 100 degrees of the horizontal field of view. However, the impact of vegetation and landform will reduce the impact in places.	3
Vertical Visual Effect	The location of the nearest turbine over 3 kilometres from the viewpoint limits the vertical visual impact.	1
Distance of Visual Effect	At a distance of 3.4 km, the visual effect of the Wind Farm forms the distant middle ground of the view.	2
Visual Effect	Moderate	13

Visual Sensitivity

Viewer Group	Due to the location of this viewpoint being in the centre of the village, potential viewers will include tourists, local commuters and residents. It is likely that this viewer group will have a heightened sensitivity to the potential visual impact, as the residents would have an intimate knowledge of their local landscape and the tourists who may take extra interest in their surroundings. The nature of the viewpoint as a destination in the centre of the village may also increase the viewer sensitivity in this location, as the views to the proposed development site may be static rather than viewed from a moving vehicle.	Substantial
Number of Viewers	The number of viewers from this location, based on site observation, population figures and local traffic volume data, would be considered to be high in relation to the regional population.	Substantial

05 Assessment of Visual Impact



Viewpoint D: Taralga Road (North) (758966 E 6194072 N)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The existing visual character is predominantly rural, with an undulating pastoral landscape and areas of natural vegetation forming the background visual character. Woolshed Creek forms a deeply cut low-lying topographical feature to the foreground. The middle ground is a layered arrangement of undulating features including Corroboree Hill and other low ridgelines and hilltops within the area. The dominant eastern ridgelines form the visual envelope running the entire length of the panorama, producing a level horizon line with limited variation and a mixture of vegetation character including areas of native vegetation, tree groups and individual trees. The landscape character is transitional, with both natural vegetation and pastoral areas forming the visual character of the existing landscape.	3.5
Degree of Visual Modification	The dominant ridgeline on which the wind farm is located forms the edge of the visual envelope. The location of the turbines on this ridgeline with a height of approximately 100m above the ridgeline gives a substantial extent of visual modification.	4
Horizontal Visual Effect	The extent of the turbines is described as 65 degrees of the field of view and would form an almost continuous visual effect for the majority of the viewpoint.	2
Vertical Visual Effect	The distance from the viewpoint to the towers limits the vertical visual impact and the wind farm is located to the background. However, the prominent location of the turbines to the along the eastern ridgelines will increase the anticipated vertical visual effect.	1
Distance of Visual Effect	At a distance of 5 km along this part of the road, the wind farm forms part of the distant middle ground of the view.	2
Visual Effect	Slight increasing to Moderate	12.5

Visual sensitivity

Viewer Group	Due to the location of this viewpoint on a nominated tourist route potential viewers will include tourists and local residents. It is likely that this viewer group will have a heightened sensitivity to the potential visual impact, as the resident would have an intimate knowledge of their local landscape and the tourist who may take extra interest in their surroundings. This location is on a road, from where the viewpoints and associated visual impact is dynamic, continually changing along the length of the road, and the viewer is likely to have changing views, but the proposed wind farm would be constant in the background.	Moderate
Number of Viewers	The numbers of viewers from this location based on site observation and local traffic volume data would be considered to be relatively high.	Substantial

05 Assessment of Visual Impact



Additional Viewpoint 1: Kearns Property (Alders and Crees Road) (H03)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The existing landscape has a strong pastoral character defined by an elevated plateau, which provides panoramic views to the north towards the Blue Mountains National Park and west to the agricultural land surrounding Taralga. The landscape is undulating with local ridgelines and depressions creating a mixed visual character of open views and screened views to ridgelines.	3.5
Degree of Visual Modification	The proposed development will dominate the landscape almost completely. This is only mitigated by topography and specific areas of vegetation that increase the capacity of the surrounding landscape to absorb the visual impact. To the south and east is a more elevated landform, with limited views to the surrounding landscape. To the west is a significant screen of Radiata Pines that filter views. However, this vegetation provides an intermittent screen and the visual modification of the wider landscape by the wind towers would be substantial.	4
Horizontal Visual Effect	The horizontal visual impact varies significantly from differing viewpoints around the property, due to the clustering of the turbines and the location of the property within the centre of the wind farm. The measured horizontal impact is described as substantial, however the effect of local ridgelines and the location of turbines reduces this impact and consequently the impact is described as an increasing effecting approximately 60-80% of the horizontal field of view.	4
Vertical Visual Effect	The vertical impact is moderate, due to the relatively close proximity of the turbines, especially to the southern views from the viewpoint.	2
Distance of Visual Effect	At 0.8 km to the nearest turbine the wind farm forms part of the foreground	4
Visual Effect	Substantial	17.5

Visual sensitivity

Viewer Group	Due to the location of this viewpoint on a private property off a minor local road, the viewers are likely to be limited to the residents. It is likely that this viewer group will have a very high sensitivity to the potential visual impact as the resident would have an intimate knowledge of their local landscape, and more importantly, because the viewing location is from their home.	Substantial
Number of Viewers	The numbers of viewers from this location based on site and household observation would generally be considered to be very low.	Slight

O5 Assessment of Visual Impact



Additional Viewpoint 2 Private Property off Bannaby Road (H05)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The existing landscape character is a rolling pastoral landscape, which becomes lower lying to the west, defined by the depression that surrounds the east and north of Taralga. North are long-range views to the distant ridgelines, which define the edge of the visual envelope. East and south are local hills that form a more enclosed visual character. The landscape character is described as rural as the surrounding paddocks have been modified through grazing operations and the surrounding landscape has limited tree cover.	3
Degree of Visual Modification	The dominance of turbines to the northeast will have substantial effect on the visual character. The relationship of the viewpoint and the surrounding topography ensures a fragmented visual impact of the natural landscape, with the visual impact focused on a few clusters of turbines.	4
Horizontal Visual Effect	While the measured horizontal visual impact is 140 degrees of the field of view, the relationship of local ridgelines and gullies reduce the extent of the impact. The horizontal impact is substantial, but may only be experienced from a variety of places on the property.	4
Vertical Visual Effect	Vertical visual impact will be slight due to the close proximity and the elevated aspect of the turbine cluster on the surrounding ridgelines.	1
Distance of Visual Effect	With the nearest turbine 1.2 km from the viewpoint the visual impact is located to the middle ground.	3
Visual Effect	Moderate	15

Visual sensitivity

Viewer Group	Due to the location of this viewpoint on a private property off a minor local road, the viewers are likely to be limited to the residents. It is likely that this viewer group will have a very high sensitivity to the potential visual impact as the resident would have an intimate knowledge of their local landscape, and more importantly, because the viewing location is from their home.	Substantial
Number of Viewers	The numbers of viewers from this location based on site and household observation would generally be considered to be very low.	Slight

O5 Assessment of Visual Impact



Additional Viewpoint 3: The Ross Property (H12)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The existing landscape character is a combination of native vegetation and grazed paddocks with a topography that is steeply sloping, cut by numerous creek lines and localised ridges that define the physical and visual character of the landscape. The viewpoint is located within a complex valley arrangement that is heavily wooded with remnant vegetation interspersed with small areas of grazed land. The visual character is contained by the distant ridgelines that surround the area creating a contained visual envelope. The landscape character would be described as natural to rural transitional due to the extent of existing bush land and tree cover that exists.	4
Degree of Visual Modification	The ability of the landscape to absorb the visual effect is limited due to the ridgeline location of the turbines. The foreground and middle ground is a combination of tree groups and paddocks that form filtered views towards the turbines. South, the landscape character is more open, up to the surrounding ridgeline, with more extensive cleared vegetation for grazing. The overall visual character is enclosed, with the turbines located on the surrounding ridgelines. The combination of enclosed visual envelope and the elevated location of the turbines on this visual envelope limit significantly the visual absorption capacity of the existing landscape. Consequently, the degree of visual modification is described as severe.	5
Horizontal Visual Effect	The horizontal visual impact would be significant, although fragmented into groups. The horizontal visual impact is measured as 180 degrees of the field of view and is described as severe.	5
Vertical Visual Effect	An assessment of the visual impact indicates a slight vertical visual effect is created by the elevated location of the turbines. The distance between the viewpoint and the nearest turbines further compounds this.	1
Distance of Visual Effect	At only 1 km from the viewpoint the turbines are part of the foreground	4
Visual Effect	Substantial	19

Visual sensitivity

Viewer Group	Due to the location of this viewpoint on a private property off a minor local road, the viewers are likely to be limited to the residents. It is likely that this viewer group will have a very high sensitivity to the potential visual impact as the resident would have an intimate knowledge of their local landscape, and more importantly, because the viewing location is from their home.	Substantial
Number of Viewers	The numbers of viewers from this location based on site and household observation would generally be considered to be very low.	Slight

O5 Assessment of Visual Impact



Additional Viewpoint 4: The Farm (North of Glenross property)

Visual Effect

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	The existing landscape character is rural with an undulating topography that is typical of the area. The visual envelope is defined by the surrounding vegetated ridgelines that dominate the visual character of the area.	3.5
Degree of Visual Modification	The local topography adjacent to the Farm, means that views directly south towards the wind farm are screened completely. Of more significance are the open views south and west towards the wind farm, which will be dominated by turbines to the surrounding ridgelines.	4
Horizontal Visual Effect	The horizontal visual impact would be significant, although fragmented into groups. From the household the photomontages indicate that some of the towers to the south would be obscured by the topography, but given that parts of the property and its entry road would view many of the towers to the south, these are included in the consideration of horizontal visual effect. The horizontal visual impact is measured as 165 degrees of the field of view and is describe as substantial	4
Vertical Visual Effect	An assessment of the visual impact indicates a limited vertical visual effect is created by the location of the turbines. The distance between the viewpoint and the nearest turbines further compounds this.	2
Distance of Visual Effect	With only 0.6 km between the viewpoint and the turbines the distance of the visual effect is almost adjacent.	4
Visual Effect	Substantial	17.5

Visual sensitivity

Viewer Group	Due to the location of this viewpoint on a private property off a minor local road, the viewers are likely to be limited to the residents. It is likely that this viewer group will have a very high sensitivity to the potential visual impact as the resident would have an intimate knowledge of their local landscape, and more importantly, because the viewing location is from their home.	Substantial
Number of Viewers	The numbers of viewers from this location based on site and household observation would generally be considered to be very low.	Slight

5.2 Description of Additional Viewpoints

The following additional viewpoint locations at the Omaru and Polley properties were reviewed as part of the inspection that was undertaken during the site visit on the 21 March 2005. These were not based on a comparison of existing landscape character and the potential visual effect produced by the wind farm. Consequently, the visual impact assessment is descriptive rather than quantitative and no value is expressed for the visual impact in each location.

Omaru Property

The landscape character surrounding Omaru is enclosed, with significant ridgelines in all directions. The overall landscape character is a mixture of rural, with pockets of native vegetation to distant ridgelines that surround the area to the east. To the west is a ridgeline that contains views. This ridge is vegetated in part. Along the northern section of the ridgeline, the woodland vegetation gives way to grazed paddocks and the potential for visual impact increases due to the open visual character.

The extent of horizontal and vertical visual impact will be limited, due to the small number of turbines visible and the position of the turbines behind ridgelines. Generally, the views of the wind farm are glimpsed. The views and panoramas to the north and east are devoid of turbines.



Polley's Property

The Polley's property is situated to the south east side of Taralga with views due east towards the wind farm. The landscape character is described as rural, as the extent of natural vegetation, either woodland or grassland, is limited. The local elevated ridgeline that the property sits on provides expansive views, similar to Viewpoint B. The foreground is defined by undulating paddocks and the background to the visual envelope is defined by the dominant eastern ridgelines. To the north east, the views are more distant, due to the lower lying topography associated with the Woolshed Creek and paddocks to the north of the town.

Due to the location of the turbines to the dominant eastern ridgelines, the ability of existing landscape to absorb the visual impact is limited with the extent of visual modification being described as substantial. The horizontal visual effect extends for a significant part of the view. The vertical visual effect is reduced primarily due to the distance between the viewpoint and the turbines. However, the position of turbines on the dominant eastern ridgelines causes significant sky lining (turbine visible against the sky).



There are some clear indications of the visual impact that can be drawn from the visual analysis conducted at the 8 viewing points.

From the public viewing areas (A-D), the village, and the main road there would be, potentially, a moderate visual effect. Importantly, the values ascribed to the landscape character, the change in landscape character and the horizontal extent of the impact are most influential in assessing the visual effect. As there is a substantial level of sensitivity for viewers at these points, this impact is considered to be unacceptable.

From the private farms and properties, which are the worst affected places, there is potentially a moderate to substantial visual impact. A great deal of this impact is derived from the horizontal extent of the proposed wind farm and the proximity of the wind turbines. The low number of viewers reduces the significance of this visual effect impact. However the scale of the visual impact is sufficient to suggest that the potential visual impact is unacceptable from all these properties.

In providing an overall assessment greater weight is given to the public viewing points where there will be a greater number of viewers and a heightened level of sensitivity. In particular viewpoints B and C are most important as they affect the people of the village in their everyday activities. As the township sits on an east-facing slope, there are numerous panoramic views to the east, where the current landscape character is of rolling hills and pastoral land uses. The proposed wind farm would dominate these views. For this reason the proposed development would be unacceptable due to its visual impact.

Viewpoints A and D are considered less important, as they will be seen primarily by motorists who will experience dynamic views. Given that the impact is slight to moderate for these viewers, the proposed development could be considered to be acceptable from these viewpoints. (However the greater weight that must be given to the more significant public viewing points in the village).

Additional viewpoints 1 to 4 all show a moderate to substantial impact. For these viewers the visual impact of the proposed development is considered to be unacceptable. They do have, however, lower levels of visual sensitivity than the public viewing points, so detailed studies that consider the removal or relocation of some of the closer towers may prove effective in reducing the visual impact from these properties.

As viewpoints B and C are significant, and because they have a moderate impact on visual effect the proposed development is considered unacceptable.

Strategies to mitigate the visual impact of the proposed wind farm development can include options to modify the physical appearance of the turbines, to modify the views towards the turbines and possibly to modify the number of turbines or placement of turbines.

Colour selection and design form of the wind turbines can be considered to reduce the potential visual impact. Research in Europe and Australia has indicated that an off white colour represents a more neutral appearance and is usually recommended. The design of the turbine and removal of decals also assist in the overall appearance. Refer to Appendix F for further information.

The physical size of the towers in this landscape of low trees and moderate relief, as well as the number of turbines makes it difficult to screen any views. The existing topography and landscape cover have a generally open nature rising towards the east of Taralga in which screening would have limited effectiveness. Potential views to the wind farm from selected locations could be screened locally, however this will impact on the open nature and character of the existing views. For example while local vegetation or modification to landform may be used to provide effective screening of potential views, this may be in conflict with a resident's preference for open panoramic views across the landscape from their living space. The preference for screening or otherwise is likely to vary depending on the individual sensitivity and preference of the viewer.

The limited options available for mitigation of the visual impact of the proposed wind farm development as outlined above also limit the effectiveness that can be achieved. Local screening of potential views is the only option within the scope of the EIS proposal, and this could only be considered on a location basis through detailed community consultation. It would not, in our opinion mitigate the visual impact as described in Section 6 at any of the representative viewpoints.

Modification to the wind farm, such as reducing the number and or size of the turbines, has the greatest potential for reducing the visual impact of the proposed development. A number of options have been considered, but these only relate to visual analysis, and would need to be tested by the Proponent to determine if viable. The options for modification that have been considered in this report are:

- Reduction in height of some or all the turbines.

As the turbines are located on the prominent ridge, and as the vertical visual effect of 110m high turbines is considered to be limited due to the distance between the village and the proposed development, the reduction in height would not affect level of visual impact that has already been assessed.

- Thinning out the clusters of wind turbines.

As the turbines are located on the prominent ridge, this may mitigate the extent of visual modification to the landscape character, however it would reduce this value by a half to one point in the matrix prepared earlier in this report, and would thus not significantly affect the conclusions that have been drawn.

- Removing clusters of wind towers

This would reduce the evaluation value of the impact on the extent of visual modification to the landscape character and the horizontal visual effect. It could be achieved in a couple of ways:

Removing 37 towers in the centre of the proposed development site, leaving 2 clusters, one in the north with 11 towers, and one in the south with 14 towers. This would reduce the visual impact to a "slight" classification, at sites A-D. However some of the private properties would still retain a substantial assessment.

An alternative would be to remove 19 towers from the south, and 11 towers from the north, leaving a balance of 32 towers in the centre of the site. The towers that are closer to the village would thus be omitted, and the horizontal extent would be considerably reduced. This is assumed to be more appropriate to the development yield than the suggestion noted in the previous paragraph. It has been analysed for its visual effect below. It is assumed that there would be no potential to alter viewer sensitivity (without significant screening).

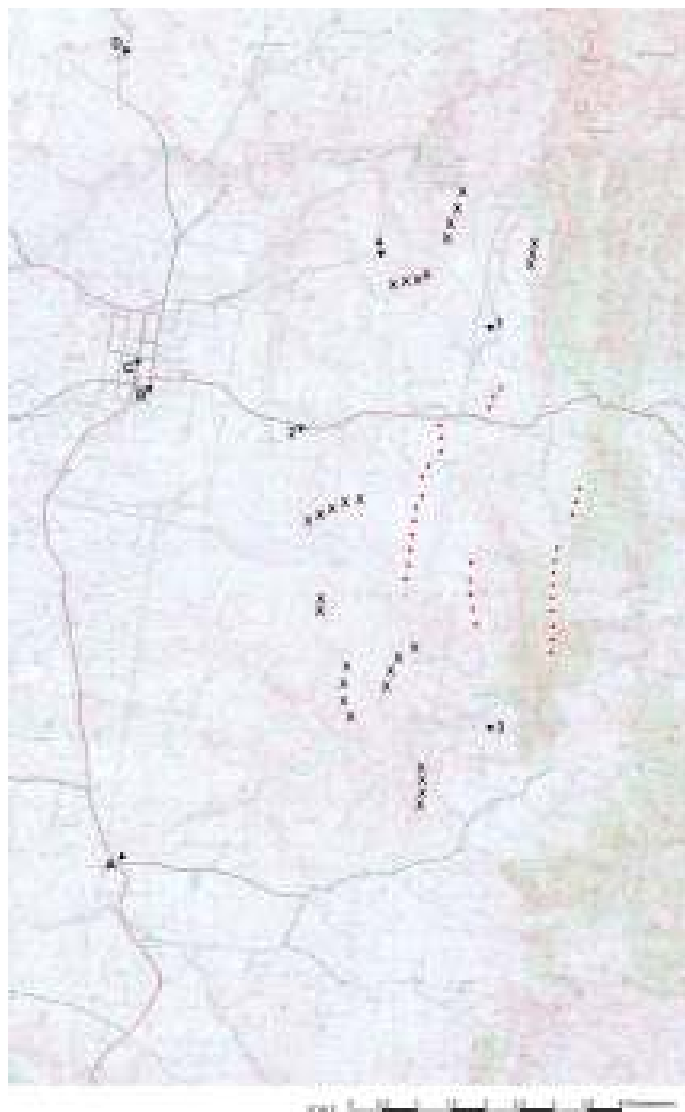


Figure 6: Alternative Turbine Layout

X = deleted turbines.

• = currently proposed turbine retained.

07 Mitigation Strategies

Viewpoint A: Intersection of Taralga Road and Hillcrest Road (758632 E 6182119N)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3.5
Degree of Visual Modification	The degree of visual modification is described as moderate.	3
Horizontal Visual Effect	The extent of horizontal visual impact is measured as 40 degrees of the panorama.	1
Vertical Visual Effect	As before	1
Distance of Visual Effect	The closest tower would be 5km from the road.	1
Visual Effect	Slight	9.5

Viewpoint B: Bunnaby Street adjacent to The Sacred Heart School (759279 E 6189023 N)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3.5
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	Less than 40 degrees.	1
Vertical Visual Effect	As before.	1
Distance of Visual Effect	The closest tower is about 4 km.	2
Visual Effect	Slight	10.5

07 Mitigation Strategies

Viewpoint C: Goodhew Park off Orchard Road (759063 E 6189430 N)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	Less than 40 degrees.	1
Vertical Visual Effect	As before.	1
Distance of Visual Effect	The closest tower is well over 5km	1
Visual Effect	Slight	9

Viewpoint D: Taralga Road (North) (758966 E 6194072 N)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3.5
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	Less than 40 degrees.	1
Vertical Visual Effect	As before.	1
Distance of Visual Effect	The closest tower is over 5km.	1
Visual Effect	Slight	9.5

07 Mitigation Strategies

Additional Viewpoint 1: Kearns Property (Alders and Crees Road) (H03)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3.5
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	Less than 40 degrees.	1
Vertical Visual Effect	As before.	2
Distance of Visual Effect	As before.	4
Visual Effect	Moderate	13.5

Additional Viewpoint 2: Private Property off Bannaby Road (H05)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	Approximately 50 degrees.	2
Vertical Visual Effect	As before.	1
Distance of Visual Effect	As before.	3
Visual Effect	Slight	12

07 Mitigation Strategies

Additional Viewpoint 3: The Ross Property (H12)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	4
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	Less than 80 degrees.	2
Vertical Visual Effect	As before.	1
Distance of Visual Effect	Beyond 1km.	3
Visual Effect	Moderate	13

Additional Viewpoint 4: The Farm (North of Glenross property)

<i>Item</i>	<i>Description</i>	<i>Value</i>
Existing Landscape Visual Character	As described previously	3.5
Degree of Visual Modification	Moderate.	3
Horizontal Visual Effect	45 degrees.	2
Vertical Visual Effect	As before.	1
Distance of Visual Effect	Less than 3km.	3
Visual Effect	Slight increasing to Moderate	12.5

There are some clear indications of the visual impact that can be drawn from the visual analysis conducted at the 8 viewing points in this alternative proposal.

From the most significant public viewing areas (B, C) in the village, there would be, potentially, a slight impact of visual effect. This is 4 points less than the full scheme as assessed earlier in this report. Most importantly the scheme does not fill a large extent of the horizon, and will not dominate the landscape. Even though there is a substantial level of sensitivity for viewers at these points, this impact is considered to be acceptable because the qualities of the natural landscape prevail for most of the viewshed.

From the private farms and properties, which are the worst affected places, there is potentially a moderate impact. The low number of affected viewers reduces the significance of this visual impact to suggest that the potential visual impact is acceptable.

Considered in light of the public viewing spots (A-D), and the private viewing points, the overall visual impact of the alternative proposal with 32 towers is acceptable.

The existing regional and sub regional visual environments can be described as naturally vegetated and topographically varied landscape to the east of the proposed development and an undulating low lying pastoral landscape to the west. The relationship of land use, vegetation and topography combined to produce a predominately modified rural setting for the proposed wind farm.

The zone of visual influence (ZVI) illustrates to what extent the wind farm will impact on the existing visual environment; how the north-south ridgelines contain the visual character of the area, and how the locations of the turbines on these ridgelines will create a dominant visual effect to the west of the wind farm. The detailed assessment of the visual effect concludes that the visual impact from the Taralga wind farm will be moderate to substantial. This is due to the following factors that combine to create the visual impact of the development:

- 1 Significance of the north-south ridgelines on the physical and visual character of the area.
- 2 Containment of the visual envelope by the ridgelines.
- 3 Location of the turbines on the ridgelines and the spread of turbines along the ridgelines.
- 4 Location of Taralga township, other dwellings and tourist roads within the ZVI of lower lying, visually open landscape to the west.

The degree of viewer sensitivity was likely to be high for viewpoints within the town and moderate on the main roads given the viewer groups are likely to include relatively large number of local commuters, residents and tourists. Viewer sensitivity for nearby residents is likely to be very high given the viewers are the residents who are viewing from their home or work place. However these are few in number.

Mitigation strategies such as design of the turbines, screening and modifications to the proposal were also considered. It was concluded that local screening of potential views of the wind farm is a possible mitigation measure, but is unlikely to significantly affect the visual impact. An alternative scheme involving 32 towers has been assessed in this report and is considered to be acceptable within the methodology adopted by this report.

In conclusion, the visual assessment finds that given the existing landscape character, containment of views from significant viewpoints by the existing landform, the number and size of the wind turbines, high viewer sensitivity and lack of mitigation possibilities, the proposed wind farm would become a dominant feature in the landscape. There is little potential for the degree of change to the visual character of the area to be absorbed or mitigated and this assessment therefore finds that the development site is not suitable for the proposed wind farm. It would only be acceptable if the towers were reduced in number as shown in figure 6.

It is also recognised that the visual assessment forms only part of the environmental impact assessment process for the proposed development. Therefore it is also recommended that the conclusions of this report be considered in the greater context of the project and its aims for providing a renewable energy resource and other impacts that the proposed development may have.