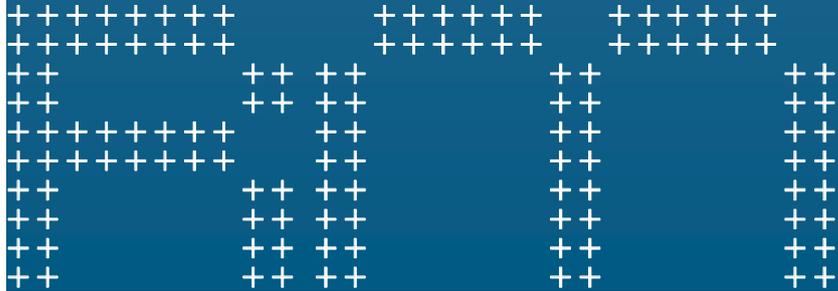
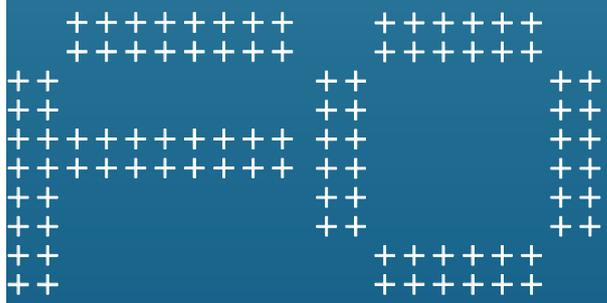
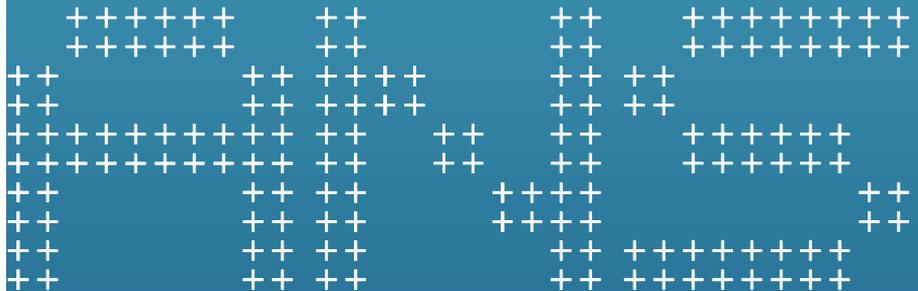
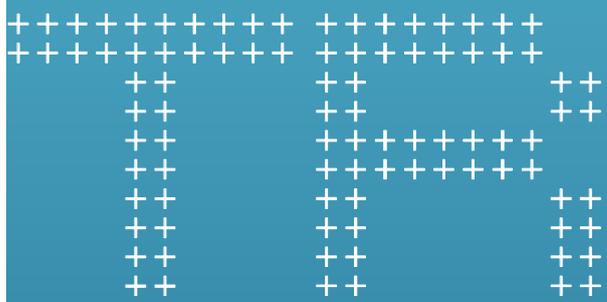


Berrybank Wind Farm

Landscape and Visual Impact Assessment

*Planning Permit Application Nos. 20092820 and
20092821*

Statement of Expert Evidence
4th February 2010



Prepared for:
Union Fenosa



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and 20092821*

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4th February 2010

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Peter Haack
Support Staff	
Job Code	MD3026
Report Number	Berrybank VIA Evidence Report

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1 Introduction

I, Peter Haack, prepared the technical report titled “**Landscape and Visual Impact Assessment – July 2009**” (**Technical Report**), which is included as Technical Appendix 5 to the Planning Application Report for the Berrybank Wind Farm (The Planning Report).

I adopt the Technical Report, in combination with this document, as my Expert Witness Statement for the purposes of the Panel of Inquiry which has been convened to consider the Planning Application.

2 Name and Address

Name: Peter Haack
Title: Director
Company: Urbis Pty Ltd
Address: Level 12, 120 Collins Street, Melbourne 3000

3 Area of Expertise

- (a) My area of expertise is Landscape and Visual Impact Assessment.
- (b) Appendix A contains a statement setting out my qualifications and experience, and the other matters raised by Planning Panels Victoria Expert Evidence Guideline. A copy of my curriculum vitae is provided in Appendix B.
- (c) I am sufficiently expert to make this statement as I have had extensive experience in the preparation of visual and landscape impact assessment studies on numerous wind farms and a range of other major infrastructure projects throughout Australia, as well as presenting expert evidence to Planning Appeals, Hearings and Panels.

4 Scope

4.1 Instructions

The briefing for the preparation of a proposal to undertake the Visual and Landscape Character Assessment Study was based on a written brief with subsequent verbal briefings for points of clarification (Refer to Appendix D – Study Brief). I was subsequently instructed by Freehills to review public submissions and prepare this Expert Witness Statement.

4.2 Process and methodology

At all stages I worked with Urbis and in this project I have:

- Assessed the landscape character of the project setting.
- Reviewed the local planning scheme zoning and overlays for the project setting.
- Researched the presence of the local landscape in art.
- Identified locations of higher visual sensitivity.
- Identified the distance that locations of higher visual sensitivity are located from the proposed development.

- Identified where existing vegetation surrounds residences.
- Calculated the horizontal and vertical visual prominence of the wind farm.
- Identified potential amelioration measures.
- Determined the potential visual impact throughout the visual catchment.

In carrying out these tasks I have:

- Inspected the site and the surrounding area.
- Taken part in a community information day.
- Met with team members to discuss issues resulting from the community engagement process.
- Worked with specialist team members who prepared photo simulations and Zone of Visual Influence analysis that informed the determination of Landscape and Visual impact.
- Prepared draft and final versions of the Technical Report for review by the proponent and Tract Consultants.

Persons who undertook specialist technical tasks in support of the Technical Report were:

Photo Simulation Preparation - Ashley Poon (Urbis)

Ashley Poon has a Bachelors Degree - Planning and Design (Architecture) and over 8 years experience in the preparation of technically accurate visualisations.

GIS ZVI Analysis - Andrew Johnson (Urbis)

Andrew is a GIS Analyst / Cartographer with experience in the spatial analysis of large scale infrastructure projects, particularly ZVI analysis.

4.3 Reports Reviewed

I was instructed to consider or take into account the following reports and materials:

- Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria (2009).
- Wind Farms and Landscape Values National Assessment Framework (2007) – AUSWEA and Australian Council of National Trusts.
- Panel reports for Waubra and Macarthur Wind Farm.
- Report on Impediments to Environmentally and Socially Responsible Wind Farm Development (2008) *Environment Protection and Heritage Council*.
- Public submissions referred to in Appendix C of my Statement of Evidence.
- Wind Farm Planning Permit Model Conditions – DPCD.

4.4 Assumptions

The assessment of night lighting assumed that the aviation lights used on the project were of an intensity similar to that of the Flash Technology FTB306i unit.

4.5 Limitations and exclusions

Given potential difficulties in gaining access to individual residences, photographs used as the basis for photo simulations have been taken at the point where the driveway to a residence intersects with the adjacent road network, i.e., the closest publicly accessible location. In many instances, views from the road network actually convey a worse case scenario in terms of visual exposure to the proposed development than views from the residences, which are often surrounded by wind break vegetation which screens views out from the residence to the surrounding landscape.

Also, not all residences have been assessed individually – a representative sample of residences that typified a worst case scenario for a particular distance or aspect have been assessed in detail. However, the total number of residences within a particular visual setting catchment have been quantified in Section 4 and summarised in Section 4.7 of the Technical Report and the highest level impact assigned to ensure no favourable assumptions are made.

5 Findings

5.1 Summary of opinions

Key findings are:

- No overlays of relevance to landscape or scenic quality apply to the study area within the Shires of Corangamite and Golden Plains.
- No National Trust citations for landscape significance exist for the study area.
- The landscape scenic quality of the study area, which is primarily a modified agricultural landscape, is generally low to moderate.
- Studies of viewer perceptions have indicated that the introduction of wind turbines into a landscape lacking strong features or character can result in an increase in scenic quality as perceived by the viewer.
- The dense band of vegetation surrounding many home yards of rural residences effectively contains the view shed from the house and surrounding yard itself, screening views to the distance to the wind farm in many instances.

Refer to Technical Report, pages 88 and 89, Section 6 – Conclusion, for a summary of opinions.

5.2 Further Mitigation Measures/Recommendations

The Technical Report contains various mitigation measures to reduce the potential impacts of the project. Refer to pages 83 – 87 of the Technical Report, particularly **Figure 5.1: Locations of Recommended Foreground Visual Screen Planting** on page 86.

Since finalising the Technical Report, and in response to the submissions, I recommend the following further modifications or further mitigation measures:

- (a) That aviation navigation lighting with an intensity and managed light emission similar to Flash Technology FTB360i units be employed on the project.

A number of submitters raise site specific issues which would generally be resolved during the detailed design phase. The responses to submissions are set out in Appendix C.

6 Response to key submissions

I have read the submissions to the Planning Report that were forwarded to me by Freehills as potentially containing comments that are relevant to the Technical Report and my area of expertise.

Those submissions generally raise issues that have already been addressed in the Technical Report and do not affect the information and opinions expressed in the Technical Report. However some of the issues raised require a more comprehensive response and this is set out in Appendix C.

7 Additional Investigations

7.1 Aviation Lighting Impacts

7.1.1 Berrybank Lighting Impact Assessment for House 63 – Airport Lighting Specialists (Revised 30th November 2009).

Subsequent to the preparation of the Technical Report I was requested to review the above lighting report.

I have reviewed the assessment of aviation lighting impacts undertaken for House 63, specifically the potential impacts of lighting on turbines 15, 54, 85, 87 and 91.

The assessment compares an optical system, the Flash Technology FTB360i, designed to minimise the amount of downward light transmitted, with the Orga type used at Waubra. Both lighting types are Medium Intensity flashing red aviation obstacle lights with a nominal intensity of 2000 candela and a flash rate of 20 – 60 flashes per minute.

The results of the assessment are that the FTB360i would be on average 21% of the intensity of the Waubra lights at equal distances and elevations.

7.1.2 Site Visit – Waubra Wind Farm Aviation Lighting

I have also subsequently visited the Waubra wind farm at night to observe the effects of aviation lighting.

The visit was undertaken on Thursday 14th January, between the hours of 8.30pm and 10.15pm. The lights on the turbines were observed over a range of distances from less than 1km to the closest turbine / light to up to 15km.

During the site visit I considered the influences of atmospheric conditions, such as cloud, on light reflection and existing additional light sources as well as the ameliorative influence of screening vegetation.

7.1.3 Conclusion of Additional Investigations

Following my additional investigations, I conclude that the night time visual impact of the proposed aviation lighting for the Berrybank Wind Farm, based on units similar to the FTB360i, will be significantly lower than for the Waubra Wind Farm which utilises Orga lighting units.

8 Comment on permit conditions and/or EMP

In order to minimise potential impacts on adjacent properties, it is recommended that the following permit condition be considered:

- Prepare visual amelioration and landscape maintenance plans consistent with conditions 4 and 5 of the Model Permit Conditions, identifying the extent of visual screen planting, number of plants, proposed species and maintenance requirements.

9 Conclusion

The Technical Report reaches the following conclusion:

- No overlays of relevance to landscape or scenic quality apply to the area within the Golden Plains and Corangamite Shires and the landscape scenic quality of the study area is generally low to moderate.
- The project, as proposed, will change the landscape of the setting at the local, sub regional and, to a lesser extent, the regional level. However, the landscape character of the setting is already highly modified by past and current agricultural activities.
- Many of the homesteads in the area have a dense band of vegetation surrounding an intimate and secluded home yard. The effect of this, in a number of cases, has been to effectively contain the view shed from the house and surrounding yard itself, blocking more distant views.
- Multiple wind farms, proposed for the broader region, will not generally be able to be seen from individual viewpoints. Therefore for static viewing locations, the cumulative impact will be negligible. However, for vehicles traversing roads throughout the broader region, multiple wind farms may result in an unacceptable change to the landscape setting for some viewers.
- The presence of pulsing aviation navigation lights in an otherwise dark, night-time landscape may result in an impact that is unacceptable to many residents. However, other lighting sources are present within the setting and obstacle lighting will not generally be visible from within residences at night.
- The impact of aviation lighting will be ameliorated if the lighting at Berrybank has an intensity and managed light emission similar to that of the Flash Technologies FTB360i unit.

Refer to Technical Report, pages 88 and 89, Section 6 – Conclusion.

10 Provisional Opinion

The opinions that I have expressed in this report are based on my experience and the experience and advice provided to me by Union Fenosa and the consultants engaged to carry out specialist studies for the Berrybank Wind Farm. Subject to any limitations and exclusions, my opinions are complete and accurate in every respect.

I am satisfied through my inquiries that the opinions I have expressed are reasonable in regard to Landscape and Visual Impact.

Declaration

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have, to my knowledge, been withheld from the Panel.

A handwritten signature in black ink, appearing to read 'P. Haack', written in a cursive style.

Peter Haack – Director - Urbis

4th February 2010

Appendix A Matters Raised by PPV Expert Evidence Guideline

- (a) the name and address of the expert;

Peter Haack, Director, Urbis. Level 12, 120 Collins Street, Melbourne.

- (b) the expert's qualifications and experience;

I hold a Bachelor of Landscape Architecture and a Diploma of Applied Science in Horticulture. I am a Registered Landscape Architect and an Associate of the Australian Institute of Landscape Architects and a Member of Parks and Leisure Australia.

I have over 25 years experience in professional practice and prior to joining Urbis as Director in June 2008 was a Principal with EDAW, employed by EDAW (Aust) Pty Ltd (1995 – 2008) and the former Loder and Bayly Consulting Group (1985 – 1995).

- (c) a statement identifying the expert's area of expertise to make the report;

I have had extensive experience in the preparation of visual and landscape impact assessment studies on a range of major infrastructure projects throughout Australia, as well as presenting expert evidence to Planning Appeals, Hearings and Panels. (Refer to Appendix B – CV).

- (d) a statement identifying all other significant contributors to the report and where necessary outlining their expertise;

Ashley Poon (Urbis)

Ashley Bachelor has a Bachelors Degree - Planning and Design (Architecture) and over 8 years experience in the preparation of technically accurate visualisations.

Andrew Johnson (Urbis)

Andrew is a GIS Analyst / Cartographer with experience in the spatial analysis of large scale infrastructure projects, particularly ZVI analysis.

- (e) all instructions that define the scope of the report (original and supplementary and whether in writing or oral) (attach project briefs if appropriate);

The briefing for the preparation of a proposal to undertake the Visual and Landscape Character Assessment Study was based on a written brief with subsequent verbal briefings for points of clarification. (Refer to Appendix D – Study Brief). I was

subsequently instructed by Freehills to review public submissions and prepare and Expert Witness Statement.

- (f) the identity of the person who carried out any tests or experiments upon which the expert relied in making the report and the qualifications of that person;

N/A

- (g) the facts, matters and all assumptions upon which the report proceeds;

All of the facts, matters and assumptions upon which my evidence is based are set out in the relevant sections of my Technical Report. I also assume that all submissions relevant to my area of expertise have been provided to me.

- (h) reference to those documents and other materials the expert has been instructed to consider or take into account in preparing his or her report and the literature or other material used in making the report;

Refer to the Technical Report.

- (i) a statement identifying any provisional opinions that are not fully researched for any reason (identifying the reason why such opinions have not been or cannot be fully researched);

All matters have been thoroughly addressed in the main Technical Report.

- (j) a statement setting out any questions falling outside the expert's expertise and also a statement indicating whether the report is incomplete or inaccurate in any respect.

All matters have been thoroughly addressed in the Technical Report.

Appendix B CV

Peter Haack

Director

Peter Haack is a Director of Urbis in the Design Studio, Melbourne Urban Planning. Peter offers over 25 years of professional experience in landscape architecture and environmental planning. Peter has gained considerable experience by working on a broad range of projects. While concentrating on predominantly landscape issues, he has worked with multi-disciplinary teams in regional planning and design, coastal studies and institutional projects.

Expertise

Peter has extensive experience in the preparation of visual and landscape impact assessment studies on a range of major infrastructure projects throughout Australia, as well as presenting expert evidence to Planning Appeals, Hearings and Panels. Peter plays a key role in a variety of planning and design teams, project directing and managing as well as liaising with the many government and public groups associated with these studies.

Wind energy projects of relevance are:

- Taralga Wind Farm Peer Review, NSW
- Crookwell II Wind Farm DA Modification, NSW
- Mt Bryan Wind Farm Planning Study, SA
- Black Springs Wind Farm Peer Review, NSW
- Bannister Wind Farm Development, NSW
- Starfish Hill Wind Farm Planning Study, SA
- Tungketta Hill Wind Farm Planning Study, SA
- Darlington Wind Farm, VIC
- Waterloo Wind Farm Planning Study, SA
- SA Planning Wind Farm Assessment Guidelines, SA
- Woolnorth Wind Farm Peer Review, TAS
- Portland Wind Energy Project, VIC
- Bald Hills Wind Farm Tenement Plan, VIC

Other Visual Impact Assessment Projects include:

- Portarlington Safe Harbour Baseline Assessment, VIC
- BHPBIO Area C Mine Expansion, WA
- Nowingi Long Term Waste Facility EES, VIC
- Hazelwood Coalfield Westfield Expansion, VIC
- SNI Interconnector Powerline EES, SA, NSW and Vic
- Eastern Gas Pipeline EES, VIC and NSW
- Northern Tasmanian Gas Pipeline, Independent Reviewer, TAS
- Minerva Gas Field Project, EES, VIC
- Gorgon Karratha LNG Project Planning Study, WA
- Frankston Bypass EES, VIC
- Papua New Guinea LNG Project, PNG
- Wambo Coal Mine, Land and Environment Court Proceedings, NSW
- Wilpinjong Coal Mine EIS, NSW
- Maryvale Coalfield Expansion EES, VIC
- Donald Mineral Sands EES, VIC

Experience

Peter was Principal and Director of EDAW prior to joining Urbis. Peter's projects included the following:

Portland Wind Energy Project, Portland, VIC

Project Director

Client: Pacific Hydro Limited

Assessed the potential visual impacts of the Portland Wind Energy Project comprising 120 wind generators at four sites near Portland in southwest Victoria. The sites are Yambuk, Cape Bridgewater, Cape Nelson and Cape Sir William Grant.

Rather than a static assessment process, a dynamic model was adopted, utilizing visual siting criteria as key inputs into the siting and design of the wind generators. The aim of adopting this process was to achieve well sited and integrated structures wherever possible. Criteria were established to guide the planning and design of the development to reduce their impact on the landscape setting from sensitive viewing locations.

The perception of the changes to the landscape were found to be dependant on the actual users of the visual setting, particularly residents.

Morwell River Diversion, Morwell, VIC

Project Director

Client: Yallourn Energy

An 8km river diversion proposed by Yallourn Energy to enable the extension of open cut coal mining operations into an area containing existing agricultural and natural values in Gippsland, Victoria. Developed a master plan within project budgetary constraints for this diversion that involved significant vegetation and landform design as well as a vegetation strategy at both broad scale and detail levels. Natural environment design and environmental planning skills were combined and integrated with a wide range of professional disciplines. Peter was key in guiding the form of the landscape to minimise impacts on the adjacent township of Morwell.

Hazelwood Mine Closure and Rehabilitation Plan, Morwell, VIC

Project Director

Client: International Power Hazelwood

This project was Commissioned by Enesar Consulting Pty Ltd on behalf of International Power Hazelwood (IPRH) to prepare a study based on a review of previous revegetation of mine site studies and a site review of the Hazelwood Mine and to produce a report based on these findings.

The objectives of the study were:

- Development of phased plans to guide the mining process toward closure.
- Development of plans to achieve a final sustainable rehabilitated end use.
- Identification and discussion of the appropriate methods for revegetation for the site.
- Identification and discussion of the constraints that will impact the revegetation of the site.
- Presentation of current research and information relevant to the area to provide guidance for choosing the most cost efficient and stable revegetation solution.

Hazelwood Mine Westfield Extension - Visual Impact Assessment, Morwell, VIC

Project Director

Client: International Power Hazelwood

- Prepared a Landscape and Visual Impact Assessment Report as part of an EES for the West Field development of the Hazelwood Mine.

The objectives of the study were:

- To assess the continuation of dredger/conveyor mining operations into Phase 2 of West Field.
- To assess the three road network options for the Strzelecki Highway deviation, with particular reference to the preferred option.
- To assess the proposed riparian corridor for the Fifth Morwell River Diversion.

- To optimise, the extent practicable, the design of project rehabilitation works for the mine and road and river infrastructure works, in order to minimise impact on views.
- To characterise the project's short- and long-term impact on views (what can be seen from nearby residences and for users of the Strzelecki Highway) and the landscape (the appearance and related values) of the project area given the existing condition of the landscape.

Tungketta Hill Wind Farm, Elliston, SA

Project Director

Client: Auskar Energy

The Tungketta Hill site is located to the south east of Elliston on the coastline of the Great Australian Bight, straddling the Flinders Highway.

The function of the study was to provide a visual assessment that clearly defined the visual impacts of the development on surrounding land use areas within the critical viewshed of the development. The report:

- defined the viewshed of the development and define sensitive viewing locations
- defined community perceptions to wind farms that may influence the sensitivity
- level of viewers.
- described the visual character of the main components of the development.
- assessed the visual impacts of the development
- identified measures to minimise the adverse visual impacts of the development.

Starfish Hill Wind Farm Project, Cape Jervis, SA

Project Director

Client: Tarong Energy and Global Intertrade Pty Ltd

This assessment report was prepared as a component of a planning application to assess the potential visual impacts of the Starfish Hill Wind Farm development.

The Starfish Hill site is located approximately 3.5 km north of Cape Jervis on the coastline of the Fleurieu Peninsula, 2km west of the Main South Road (Fleurieu Way).

The cultural values of the highly modified landscapes of the Fleurieu Peninsula were a key consideration as well as views from tourist nodes such as Cape Jervis and Kangaroo Island. Assisted by Garrad Hassan with ZVI mapping and simulations produced on Wind Farmer software.

Eastern Gas Pipeline Project, VIC / NSW

Project Director

Client: BHP & Westcoast Energy

BHP and Westcoast Energy established a joint venture company to investigate the feasibility of developing a 740km gas pipeline from Longford in Gippsland, Victoria to Wilton in NSW. An investigation process was undertaken of a number of possible corridors for the pipeline and a preferred route selected. This route ran from Longford to Wilton via the Cann River Valley, Bombala, Cooma, Nowra, Port Kembla and Wollongong. The scope was to undertake a landscape and aesthetic assessment of the preferred route as part of an environmental assessment (EIA) process for the project which is based on agreed requirements established by the NSW and Victoria Governments together with the Commonwealth Government.

Bannister Wind Farm, NSW

Project Director

Client: Australian Power and Water / Marubeni Corporation

The Bannister site is located on the Great Dividing Range, approximately 30 km north west of Goulburn and 10 km south of Crookwell. Prepared an assessment report which assessed the potential visual impacts of the Bannister Wind Farm development as proposed by Marubeni Corporation in New South Wales.

The function of the report was to provide a visual assessment that clearly defined the visual impacts of the development on surrounding land use areas within the critical viewshed of the development.

Minerva Gas Field Development, VIC**Project Director****Client: BHP Petroleum**

Provided specialist services in relation to visual/landscape issues associated with his major off-shore gas project being developed by BHP. Advice was provided on the visual impact of an off-shore gas platform, the most appropriate area to bring the gas pipeline ashore and where to locate the onshore facilities in relation to visual and landscape issues.

ETSA Riverlink Interconnection Powerline EES, NSW / SA**Project Director****Client: ETSA/ Sinclair Knight Merz**

Engaged by SKM to assist them in the preparation of an impact assessment of a proposed interconnection powerline between Buronga in NSW and Robertstown in SA. Issues to be considered were the impact of the powerline on landscape, vegetation and visual values. Field work included following the length of the entire route.

Mildura Marina EES, Visual / Landscape Assessment, VIC**Project Director****Client: Transtate Limited**

The team undertook the visual and landscape assessment of a proposed marina and associated commercial, hotel and residential complex in a high profile location beside the Sturt Highway at the point at which it crosses into Victoria from NSW. The site had a high sensitivity due to its gateway location and the need to maintain the visual integrity of the Murray River corridor.

Moura Ammonium Nitrate Plant, QLD**Project Director****Client: BHP**

Provided specialist services in relation to visual/landscape issues associated with this major project being developed by BHP in association with its coal mining activities. Advised on the siting of the plant and undertook assessment of visual impact and recommended amelioration strategies.

Scoresby Transport Corridor Visual Assessment, VIC**Project Manager****Client: Sinclair Knight Merz**

Undertook a visual assessment of a number of major transport initiatives, including a 36km freeway proposal in the eastern suburbs of Melbourne as part of an Environmental Effects Statement study.

Port Campbell (Iona) to Corio Gas Pipeline Study, VIC**Project Director****Client: GTC / Sinclair Knight Merz**

Assisted SKM in the preparation of an impact assessment of a proposed gas pipeline. Issues considered were the impact of the pipeline on landscape, vegetation and visual values. A combination of field work and desk top analysis was used to assess the impacts.

Qualifications and Affiliations

- Bachelor Landscape Architecture (RMIT)
- Diploma Applied Science (Amenity Horticulture) (VCAH Burnley)
- Registered Landscape Architect
- Associate, Australian Institute of Landscape Architects (AAILA)
- Member, Parks and Leisure Australia

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Appendix C Response to Submissions

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
Statutory Authorities			
<p>Corangamite Shire Council</p> <p>Mechanisms to provide, fund and maintain additional screen planting are required, particularly those off site.</p> <p>Night lighting ZVI is Required.</p> <p>An assessment of day time and night time impacts from all house sites to be undertaken.</p>	<p>Submission 27, Pages 42, 43, 45, 54 and 55.</p>	<p>Visual screen planting has been proposed in the Technical Report based on Model Permit Conditions 4 and 5.</p> <p>As the navigation warning lights are located at hub height, the ZVI for CASA recommended light spread (not to exceed 10 degrees below horizontal) would be essentially the same as that for the hub height Refer to Figure 4.1 of the Technical Report for a ZVI of Hub Height.</p> <p>For lights with a 0.5 degree spread below horizontal, for example lights similar to those installed at Mt Miller Wind Farm (Refer to Section 5.1.2), the outer extent of the ZVI (areas from where the lights would be visible) would be the same as for daytime hub height visibility. However, there would be fewer locations in close proximity to the turbines where the lights would be visible due to the baffling of downward light spill reducing visibility.</p> <p>Not all residences have been assessed individually at the detailed level. A representative sample of residences that typified a</p>	<p>Refer to Section 5 of the Technical Report. Establishment and management of amelioration screen planting are recommended to be included as a permit condition consistent with Model Permit Conditions 4 and 5.</p>

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
		<p>worst case scenario for a particular distance or aspect have been assessed in detail, However, the total number of residences within a particular visual setting catchment have been quantified in Section 4.7 of the Technical Report and the highest level impact assigned to ensure no favourable assumptions are made.</p> <p>It is likely that an assessment undertaken from house sites would result in a lower level of impact during the day and night due to the screening effects of vegetation around the home yard of the residences.</p> <p>There will be a difference in impact between day time and night time views as, with only approximately 50% of turbines proposed to be lit, fewer turbines will be visible at night and fewer people will be outdoors to view the effects of the lighting.</p>	
Other Submitters			
<p>GB and CE Keating</p> <p>Believes that wind turbines will change the landscape of the area permanently.</p>	<p>Submission 5, Pages 4 and 11</p>	<p>The Technical Report (Section 6.2) acknowledges that the wind turbines will result in a change to the landscape character of the setting. Section 2.4.5 also identifies that some people may regard the change as positive, increasing the visual interest of the landscape.</p>	

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
<p>Believes that no consideration has been given to visual impacts on the farm workplace.</p>		<p>The Technical Report also finds that the landscape is highly modified, of low to moderate scenic quality, and potentially able to accept visual change.</p> <p>Assessment methodologies typically regard rural landscapes subject to exploitation as an economic resource as being of a lower visual sensitivity than residences within this setting. (Refer to Section 1.5.1 and 6.2).</p>	<p>Refer to Section 5 for amelioration. No amelioration of the workplace is proposed. Visual screen planting has been proposed in the Technical Report for this respondent's residence.</p>
<p>Brendan Keating</p> <p>Believes the size and number of turbines will be prominent in the flat topography and dominate the landscape.</p> <p>Visual screening may take years to grow.</p>	<p>Submission 6, Page 2</p>	<p>The ZVI analysis is effectively a worst case scenario as it does not take into account the screening effect of vegetation and structures. (Refer to Section 4.2). Throughout the landscape, retained and planted vegetation provides compartmentalisation of views, meaning that not all the turbines will be able to be seen at the one time.</p> <p>When ameliorating tall elements, visual screening is most effective when planted in close proximity to a sensitive viewing point. In these instances, visual screening occurs once the plant exceeds eye-height. The time taken to achieve this height can vary, but even under arduous conditions, this height is generally achieved within 3 years for</p>	

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
Screen planting for land owners not in the project has not been considered		<p>most hardy, screening species.</p> <p>Residences of non-beneficial landowners have been considered for visual screen planting. Refer to Section 5, Figure 5.1.</p>	Visual screening is recommended consistent with Model Permit Conditions 4 and 5.
<p>David Hocking</p> <p>The size of the project and the scale of the wind turbines will impact on amenity.</p> <p>The “strobing” navigation lighting on the turbines and the reflection off the blades will make it difficult to sleep at night.</p>	Submission 17, Page 3, 5 and 6.	<p>The Technical Report (Section 6.2) acknowledges that the wind turbines will result in a change to the landscape character of the setting. Section 2.4.5 also identifies that some people may regard the change as positive, increasing the visual interest of the landscape.</p> <p>Throughout the landscape, retained and planted vegetation provides compartmentalisation of views, meaning that not all the turbines will be able to be seen at the one time.</p> <p>The lighting, which will appear as blinking rather than strobing points, will only be visible when looked at directly. The lights will not reflect a colour “cast” over a distance.</p> <p>The visible lighting of the blade as it passes the light will generally only be visible for distances up to 1km. (Refer to Section 4.1.3).</p>	Baffling and management of light intensity and spill should be undertaken in accordance with current best practice – such as the use of lights similar to Flash Technology FTB360i units.

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
<p>Connecting power line along Padgetts Lane will be unsightly</p> <p>Visual screen planting should be offered to landowners not involved in the project.</p>		<p>The Technical Report (Section 3.2.5) states that the power line could be either underground or above ground and located within the road reservation. Should it be located above ground, its appearance will be similar to that of many powerlines located along rural roadsides. (Refer to Section 6.5).</p> <p>Residences of non-beneficial landowners have been considered for visual screen planting. Refer to Section 5, Figure 5.1.</p>	<p>Consider placement of power lines under ground.</p> <p>Visual screening has been proposed for this property consistent with Model Permit Conditions 4 and 5.</p>
<p>Anne and Allan Schafer</p> <p>The size of the project and the scale of the wind turbines will impact on the landscape amenity.</p> <p>Vegetation planting would take many years and have limited effect on screening of views.</p>	<p>Submission 21, Page 2.</p>	<p>The Technical Report (Section 6.2) acknowledges that the wind turbines will result in a change to the landscape character of the setting. Section 2.4.5 also identifies that some people may regard the change as positive, increasing the visual interest of the landscape.</p> <p>The Technical Report also finds that the landscape is highly modified, of low to moderate scenic quality, and potentially able to accept visual change.</p> <p>When ameliorating tall elements, visual screening is most effective when planted in close proximity to a sensitive viewing point. In these instances, visual screening occurs</p>	<p>Visual screening has been proposed for this property consistent with Model Permit Conditions 4 and 5.</p>

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
<p>The “strobing” navigation lighting on the turbines and the reflection off the blades will cause an impact at night.</p>		<p>once the plant exceeds eye-height. The time taken to achieve this height can vary, but even under arduous conditions, this height is generally achieved within 3 years for most hardy, screening species.</p> <p>The lighting, which will appear as blinking rather than strobing points, will only be visible when looked at directly. The lights will not reflect a colour “cast” over a distance.</p> <p>The visible lighting of the blade as it passes the light will generally only be visible for distances up to 1km. (Refer to Section 4.1.3).</p>	<p>Baffling and management of light intensity and spill should be undertaken in accordance with current best practice – such as the use of lights similar to Flash Technology FTB360i units.</p>
<p>Mr Darryl Baxter and Mr and Mrs EE Baxter</p> <p>The towers and turbines will impact on the amenity and character of the area and submitters property, including work areas.</p>	<p>Submission 24, Pages 2 and 3.</p>	<p>The Technical Report (Section 6.2) acknowledges that the wind turbines will result in a change to the landscape character of the setting. Section 2.4.5 also identifies that some people may regard the change as positive, increasing the visual interest of the landscape.</p> <p>The Technical Report methodology is based on a generally accepted assumption that economic production agricultural areas, particularly those subject to cultivation, are less visually sensitive than the area around the</p>	<p>Visual screening has been proposed for this property and is recommended to be a permit condition.</p>

Issue	Submission No. and relevant page	Response	Recommended Modification/Mitigation Measure
<p>The navigation lighting on the turbines will cause an impact at night.</p>		<p>primary residence. Refer to Section 1.5.1 - Approach to Assessment.</p> <p>The lighting will only be visible when looked at directly. The lights will not reflect a colour "cast" over a distance and existing vegetation around the house, in conjunction with additional ameliorative screen planting, will reduce night and day time views to the wind farm from the residences.</p>	<p>Baffling and management of light intensity and spill should be undertaken in accordance with current best practice – such as the use of lights similar to Flash Technology FTB360i units.</p>
<p>R. White</p> <p>Impact of road side fuel reduction burns on visual screen planting.</p>	<p>Submission 26, Page 1.</p>	<p>The existing roadside reservations contain significant areas of planting which would be incorporated within existing CFA fire management plans. Future screen planting would be incorporated within property boundaries rather than road reservations and could be incorporated within the existing fire management plans.</p>	<p>The recommended planting should be planned / located to ensure accordance with local CFA fire management plans.</p>

Appendix D Scope of Work, June 2007

D.1 Scope of Work

Landscape and Visual Assessment including:

- Site Introduction and the study area
- Implications of Government legislation and policy
- Wind Farm Public Perceptions and Attitudes
- Viewshed
- Landscape Unit
- Road Network and traffic volumes
- Seen Area Assessment
- Visual Impact Assessment
- Impacts on View points and Dwellings
- Photomontages of sensitive view points and dwellings
- Mitigation Measures
- Cumulative Impact Assessment
- Signage
- Night Lighting Impacts and Recommendations
- Recommendations

The purpose of the Visual Impact Assessment is to identify any sensitive receivers that may be unacceptably impacted (according to relevant guidelines, policies, regulations and/or legislation) by visual amenity impacts from the operation of the proposed Berrybank Wind Farm.

The Visual Impact Assessment Report is required to address all Berrybank Wind Farm visual impact related issues and is required to satisfy relevant authorities. The report will ultimately be included as a chapter of the overall EES or PPA submission for the project and must be written to seamlessly incorporate with this document.