# LAL LAL WIND FARM PROJECT UPDATE 4

*This Project Update was first issued by WestWind Energy in November 2007*

This is the fourth Project Update from WestWind Energy to provide you with further information about the proposed Lal Lal Wind Farm. You have received this because you are on our stakeholder database.

Please contact us if we do not have your correct contact details or if you know of anyone who has not received a copy of this Project Update but would like to. (Please refer to the back page for contact details).

# News In Brief

## REVISED WIND FARM LAYOUT

WestWind Energy presented the Revised Layout of the proposed Lal Lal Wind Farm at the second Community Information Day that was held on Sunday 14th October 2007 at Dunnstown. The Revised Layout shows the proposed location of wind turbines, access tracks and other infrastructure. There are a number of differences between the Indicative Layout which was presented at the first Community Information Day. Differences include the removal of several wind turbines, relocation of others and a reduction in the maximum height to be considered for the wind turbines from 150 m to 130 m. These changes have been made as a result of expert feasibility studies and community consultation. Further changes may be made to the layout prior to us lodging our formal planning permit application.

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## WIND FARMS - MYTHS AND FACTS

In May 2007 the Victorian government published a document called 'Wind Energy Myths and Facts'. In this section of the Project Update, WestWind Energy refers to this publication to provide our own response to some of the myths that are circulating about wind farms in general and in relation to the proposed Lal Lal Wind Farm in particular.

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## FEEDBACK FROM SECOND COMMUNITY INFORMATION DAY

WestWind Energy held its second Community Information Day for the proposed Lal Lal Wind Farm at the Dunnstown Recreational Reserve on Sunday 14th October 2007. The purpose of the day was to provide the host community with another opportunity to view our plans and to provide constructive feedback to inform the design of the wind farm before we lodge an application for a planning permit.

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## LAUNCH OF AUSTRALIAN WEBSITE

WestWind Energy launched its Australian website at the Community Information Day. The website is still under construction; however it currently contains a wide range of information on the Mt Mercer and Lal Lal projects as well as range of information about our company and wind energy in general.
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# REVISED WIND FARM LAYOUT

## DEVELOPMENT OF WIND FARM LAYOUT

A wind farm layout is a map of a wind farm site which sets out the precise location of wind turbines and other infrastructure within that site. The development of this layout is an iterative process which is refined over time before a planning permit application is submitted to the Responsible Authority.

WestWind Energy have used three major revisions of its wind farm layout; i) Indicative Layout, ii) Revised Layout, and iii) Proposed Layout. Between each major revision WestWind Energy gathers input from various stakeholders including state and federal government agencies, referral authorities, the host community, and expert consultants addressing key issues such as flora, fauna and noise.

## INDICATIVE LAYOUT

The Indicative Layout is simply a starting point in the design process and shows indicative locations of wind turbines within the proposed site. The Indicative Layout for the proposed Lal Lal Wind Farm was presented by WestWind Energy for public comment at the first Community Information Day (April 2007).

Since that time, WestWind Energy has received feedback from the stakeholders outlined above. We have also hired expert consultants to conduct specialist studies which have looked in detail at the proposed Elaine and Yendon sections of the site to assess the impact the wind farm may have on this environment. This process has identified a number of issues which have informed the re-design of the layout, giving rise to the Revised Layout.

For example an initial visit by our Heritage consultant and other stakeholders identified a number of previously unknown cultural heritage sites within the wind farm site that need to be avoided. Other issues come in to play, including the practicality of construction within certain parts of the site.

## REVISED LAYOUT

WestWind Energy presented the Revised Layout at the second Community Information Day (October 2007). A copy of the Revised Layout is provided with this Project Update for your convenience. The maps show 29 wind turbines at the Elaine Section and 39 wind turbines at the Yendon Section.

Key points of difference between the Indicative Layout and the Revised Layout are:

- Some wind turbines have been removed. There are currently 68 turbines in total.
- Some wind turbines have been relocated.
- The maximum height of the turbines has been reduced from 150 m to 130 m.
- The location of access tracks is shown along with the switchyard locations

WestWind Energy is currently in the process of reviewing feedback gathered from the latest Community Information Day and is continuing with its expert studies across the two sections of the site and the local area. The information gathered will inform a further revision of the layout and preparation of the Proposed Layout which will be submitted as part of the planning permit application.

If you have any further comment to make on the Revised Layout, please contact our Buninyong office.

## KEY FACTS ABOUT THE WIND TURBINES

Each wind turbine will have a generation capacity of approximately two megawatts, giving the overall wind farm a capacity of approximately one hundred and forty megawatts. Other key physical parameters include:

- Maximum rotor diameter of 95 metres (i.e. maximum blade length of up to 47½ metres).
- Tower height up to 85 metres.
- Overall wind turbine height up to 130 metres (to the top of the sweep of the blade tip) e.g. 85 m tower with 82 m rotor = 126 m or 80 m tower with 93 m rotor = 126.5 m.
- Blade rotational speed ranging between 6 and 20 revolutions per minute, depending on wind speed (i.e. variable speed wind turbines).

# WIND FARMS - MYTHS AND FACTS

The development of wind farms often arouses vigorous debate within host communities. Key elements of this debate are often based on misunderstandings or untruths which give rise to myths about wind farms. Indeed, there are many myths circulating about wind farm developments, and in recognition of this the Victorian Government has recently released the 'Wind Energy Myths and Facts' publication.

In this section of the Project Update, WestWind Energy uses this government publication to provide our own response to some of the key myths that are circulating in relation to the proposed Lal Lal Wind Farm (see overleaf).

The full 'Wind Energy Myths and Facts' publication can be viewed online at;
www.sustainability.vic.gov.au.

**MYTH:** *Wind turbines use more energy to make than they can deliver.*
**FACT:** *The energy used to make wind turbines is quickly recovered by the amount of electricity they generate.*

Wind turbines of the type that will be used at Mt Mercer Wind Farm and Lal Lal Wind Farm (if approved) will generate an equivalent amount of energy consumed to manufacture, transport, install and maintain them within a few months of becoming operational.

**MYTH:** *Wind farms are unreliable.*
**FACT:** *Wind farms are a proven and reliable provider of energy.*

Wind power is an intermittent resource, however the availability of this resource can be predicted with a very high level of accuracy. Wind farm developers like WestWind Energy seek out the locations with all the criteria for predictable wind resources. Key features of these locations are;

- There are consistently strong winds across the site.
- It is primarily flat to undulating terrain with few features to adversely affect wind speeds.
- Detailed wind resource analysis is conducted prior to construction and throughout the life of the wind farm

Research and careful consideration of the location of the wind turbines ensures that the wind farm will generate a reliable and predictable supply of renewable electricity.

**MYTH:** *Wind farms don't generate much energy.*
**FACT:** *Victoria's wind farms currently generate enough clean electricity to power over 77,000 Victorian homes.*

As at May 2007, Victoria had 134 megawatts (MW) of installed wind energy capacity, with another 1,178 MW either in construction or having received planning approval.

1,000 MW of wind energy capacity will generate enough renewable energy to power over 440,000 homes (equivalent to almost 40% of Melbourne's domestic energy demands). 1,000 MW of renewable energy also reduces Victoria's greenhouse gas emissions by over 2.5 million tonnes each year.

Victoria's wind energy industry makes a significant contribution to Victoria's energy supply and to reducing Victoria's greenhouse gas emissions.

**MYTH:** *Wind farms are inefficient.*
**FACT:** *Wind farms convert wind to energy very efficiently.*

Wind turbines use highly developed and proven technology which makes them very efficient machines. They are able to convert up to 50% of the energy in the wind into electrical energy. To put this into perspective; by comparison the brown coal power stations convert approximately 25% of the energy in coal into electricity.

Some people also believe that wind farms are inefficient because the wind doesn't always blow. As outlined above, wind farms in Victoria are sited to take advantage of geographical locations which produce consistent and predictable wind resources so that wind farms provide renewable energy more than 90% of the time.

**MYTH:** *Wind farms are noisy.*
**FACT:** *You can hold a normal conversation at the base of a running turbine without having to raise your voice.*

The technology used to manufacture wind turbines has advanced to a point where the mechanical sound from a modern wind turbine has been practically eliminated, and any noise associated with wind turbines in motion is usually overridden by other ambient noises such as the wind in vegetation and the sound of cattle or sheep.

Furthermore, the planning process ensures that any noise issues associated with the operation of wind turbines is determined and addressed before the wind farm is built. This ensures noise levels are below an acceptable limit.

## FEEDBACK FROM SECOND COMMUNITY INFORMATION DAY

WestWind Energy hosted its second Community Information Day for the proposed Lal Lal Wind Farm project on Sunday 14 October 2007, at the Dunnstown Community Recreation Reserve. The event was intended to provide members of the host communities with another opportunity to view our plans and provide us with constructive feedback on our proposal before we lodge an application for a planning permit. Specifically WestWind Energy was seeking feedback on the Revised Layout of the proposed wind farm in order to inform the development of the Proposed Layout for the planning permit application.

Information presented at the Community Information Day included:

- The Revised Layout of the Yendon and Elaine sections of the Lal Lal Wind Farm (these layout maps are also included in this Project Update).
- Photomontages showing views of the proposed wind farm from some key public viewpoints .
- General information on wind energy and wind farms.
- Specialist studies including an environmental report.
- Information on the planning process and how you can have your say.

The event was well attended by approximately 200 people including local residents, industry professionals, supporters, objectors and those with a general interest in renewable energy. Comments were gathered by way of conversations with attendees and from written comments provided on the day.

WestWind Energy has reviewed all comments received and our staff are currently in the process of responding, where possible and appropriate, to those comments. For example, some respondents suggested that additional photomontages be prepared from specific vantage points. We are considering these requests in consultation with the landscape architects who prepared the original photomontages. Any additional photomontages will be presented as a part of our planning permit application and at the formal Planning Panel hearings that will be conducted by the Responsible Authority.

## LAUNCH OF AUSTRALIAN WEBSITE

WestWind Energy also used the Community Information Day to launch our new website. The website is still under construction but currently contains a wide range of information about our Victorian wind farm projects including Mt Mercer Wind Farm and Lal Lal Wind Farm. The website includes information about WestWind Energy, Frequently Asked Questions, Employment Opportunities, Project Updates and links to other potentially useful websites.

The website is an important part of keeping the local community informed and up-to-date on our projects. It also provides another opportunity for people to provide comments to WestWind Energy via the on-line contact form in the website.

***www.w-wind.com.au***

## FURTHER INFORMATION & CONTACTING WESTWIND ENERGY

WestWind Energy posts key information, including the reports of our specialist studies, on its web site.

If you have a specific question or concern that you would like to raise with us, or if you would simply like to be added to our mailing list, please do not hesitate to contact our Buninyong Project Office, or contact us from within our website.

505 Warrenheip Street (PO Box 667)
Buninyong VIC 3357
Telephone: .....03 53 210 210
Facsimile: .....03 53 210 280
Web:.....www.w-wind.com.au