

# Local Generation

MainPower's Generation Projects Newsletter

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## Mount Cass Update

Hurunui District Council's resource consent hearing for the Mt Cass wind farm is due to start on 24 November. The hearing will provide an airing for all views on the proposed project, and will be held before a panel of independent commissioners. It's expected to take two to three weeks.

Formal submissions for the proposal closed in August this year. 340 submissions were received and we were pleased that by far the majority of these were in favour of the wind farm. We expect a decision on the consent application to be made in early 2009.

## Conservation Management Plan

There are some really clear environmental benefits of wind farming. The project will make a meaningful contribution to New Zealand's renewable energy efforts while reducing greenhouse gas emissions.

However, when you build a wind farm on the top of a remote hill, there are bound to be some impacts on the plant and animal life, and of course, on the landscape. So there is a balancing act that goes on and we have been working hard to achieve that balance.

We have developed a "Conservation Management Plan" to offset any unavoidable impact on plant or animal life. For example:

- We will establish a covenant of over 120 hectares of native shrubland and forest on MainPower land in which we will restrict grazing and carry out weed and pest control. This will mean the land is protected forever, long after the windfarm is gone.
- We are going to replant around 25 hectares of similar vegetation within the covenant area to compensate for the five hectares that will be cleared for construction.
- We will relocate and propagate the Canterbury limestone wheatgrass and plants of other rare species that will be affected, into ecologically appropriate sites.
- We will move as many as we can of the Canterbury gecko in the construction zone to a 'safe' site on the hill. We will also provide on-going predator-control to ensure this species survives in its new home.



Mt Cass Conservation Area (blue line), MainPower property (red line) and area for revegetation (yellow)

## Why a Wind Farm?

### Who are we?

MainPower is the electricity lines company operating in North Canterbury and Kaikoura.

### What's the problem?

There is no electricity generation in our region. However, our energy consumption (the amount of electricity we use) is growing at twice the national rate. And in the South Island as a whole, the growth in demand for electricity is outstripping any growth in supply. This leaves us vulnerable in times of national energy shortage and vulnerable to price rises.

MainPower believes our region can become 75 percent energy self-sufficient through a portfolio of small to medium generation projects using renewable resources. The Mt Cass wind farm would be an important step in achieving that goal.

### What's so good about wind?

Wind is a secure and clean fuel. It is a key to New Zealand's energy future. The Government's Energy Strategy to 2050 encourages large growth in New Zealand's wind energy capacity to lower carbon emissions and deliver secure, clean energy at affordable prices to support economic growth.

### Why Mt Cass?

We have investigated wind farm options in North Canterbury for a number of years. When we look at wind resource and other factors such as access, transmission connection and ability to manage impacts, then Mt Cass stacks up as the best site.

### What does the proposal involve?

Our application seeks approval to build, operate and maintain the Mt Cass Wind Farm. The application is based on a range of options for the type and number of turbines to be used for the wind farm – a "design envelope" approach. Depending on the type of turbines chosen, the wind farm could generate enough energy for 11,000 – 24,000 homes. This would provide enough power for all the households in the Hurunui and Waimakariri districts, and avoid the production of up to 82,000 tonnes of carbon dioxide a year – or about the same CO<sub>2</sub> output of 19,000 cars.

# Submission Comments

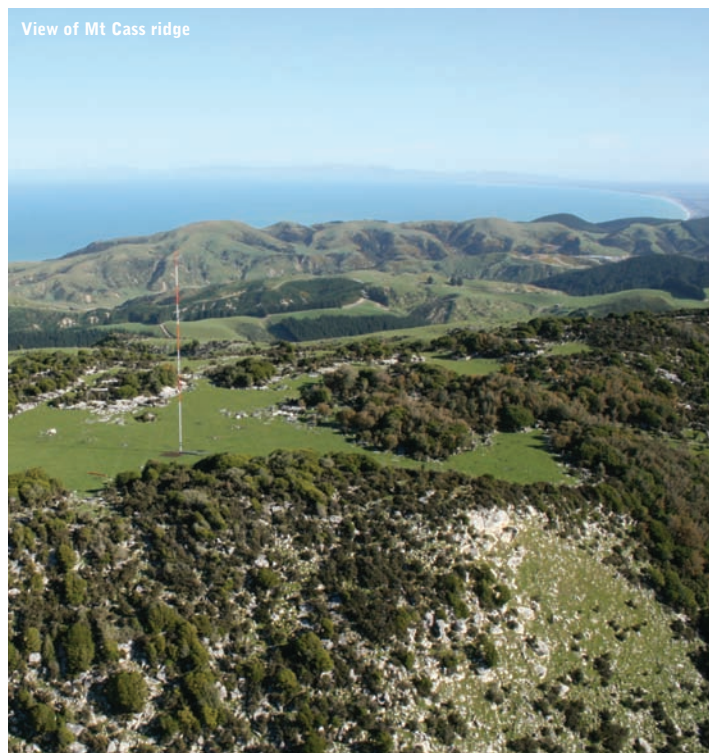
**“I am a retired Power engineer with considerable history of environmental action... I see this proposed development as very much in the District’s and Nation’s Interest. As fossil fuels continue inevitably increasing in price, it becomes more and more important that we maximise our exploitation of the various renewable energy resources available to us. The matter of minimising greenhouse gas emissions is also vital to both National and International welfare...”**

“As a regular user of the walkway on Mt Cass I wish to support the application for a windfarm as I believe that any effect on the ecology of the area will be minimal and in fact the care of rare species of flora and fauna will be enhanced by the resources put into the project. Extending the walkway to view the wind generators and additional landscape I think will encourage more people to use the area which can only be good for the district...”

**“I support the proposal and am concerned that there may be misguided opposition on the grounds of visual impact. Visual assessment is usually largely subjective. I believe mine to be balanced by an objectivity derived from 40 years experience in the design and assessment of proposals for a variety of visually significant projects... I am satisfied that the turbines of the “windfarm” proposed will be visible from locations such as the state highways, but that they are not inherently ugly and will only form a very small component in the overall view of the highly modified farmed landscape. They will not be obtrusive and the visual impact will be less than minor.”**

“...I am 82 and feel the cold. I am frightened of power cuts as our house is all electric. I fully support the use of land to establish a wind farm on Mt Cass ridge. It is good to use the natural resources available...”

**“I have lived and farmed in this area for over 70 years...From our kitchen window we can see Mt Cass and part of the ridgeline. We have been able to observe its beauty on a daily basis for the last 45 years...I am quite happy to admire the wind turbines because they are performing a useful function: producing electricity...”**



## **From the joint submission from Alpine Energy Limited, Electricity Ashburton Limited, Orion New Zealand Limited**

“We jointly support MainPower’s proposed new wind farm on Mt Cass because it will help ensure a secure supply of electricity to our region and will help our communities’ economic and social wellbeing... We consider that a power scheme at Mt Cass would positively impact on reliability of power supply into the upper South Island in relation to both transmission security...and the more obvious area of additional generation capacity...From the information provided by MainPower it is estimated that Mt Cass will reduce wholesale energy prices by up to \$46m nationally. This is around 1% of the annual New Zealand electricity bill.”

**“I strongly endorse the application for resource consent. Energy security and carbon emission reduction are two crucial areas that Canterbury must address. The proposal does both and with minimal environmental impact (as verified by an independent report). Climate change demands dramatic action – such as the Mt Cass Wind Farm. Yet this Wind farm has so few negative effects! As Canterbury currently produces no large scale power this is a crucial decision. Granting resource consent will have many positive benefits for Cantabrians now – and in the future.”**

“Ensuring security of electricity supply is a critical issue for all New Zealanders. A key advantage of electricity generated by wind is that supply is not dependent on rainfall, and as such complements current hydro generation extremely well. The MainPower development will help ensure continued electricity supply for both local consumers and industry during dry periods...”

**“...The windfarm offers greater diversification of generation systems to the electricity national grid...New technical skill sets will be introduced to the local area’s employment base for the building and maintaining of the wind farm, with long term positive flow-on effects to other local industries...MainPower is a visionary company that is a large and positive contributor and stakeholder in the local communities it serves...”**

## **Our Other Commitments to Renewable Energy**

MainPower’s commitment to renewable generation extends beyond the proposed Mt Cass wind farm. We are investigating a number of other projects to meet our aim of achieving 75 percent energy self-sufficiency for the region.

One example is the Browns Rock Hydro Project, which could operate in conjunction with the existing Waimakariri Irrigation scheme.

The water would be diverted, via the irrigation canal, from a point about four kilometres downstream from the Gorge Bridge on the Waimakariri River. The water will be returned to the river about eight kilometres further downstream, after passing through the turbines.

The force of the water running through these turbines will provide around eight MegaWatts of local supply to the network around Oxford and Cust.

So far, we have performed environmental assessments and talked to people who may be affected. The project is still at the investigation stage, but like the Mt Cass proposal, we will keep the community involved and informed.

Contact Us

For further information about MainPower’s plans to develop a wind farm at Mt Cass please visit [www.mainpower.co.nz/generation](http://www.mainpower.co.nz/generation)