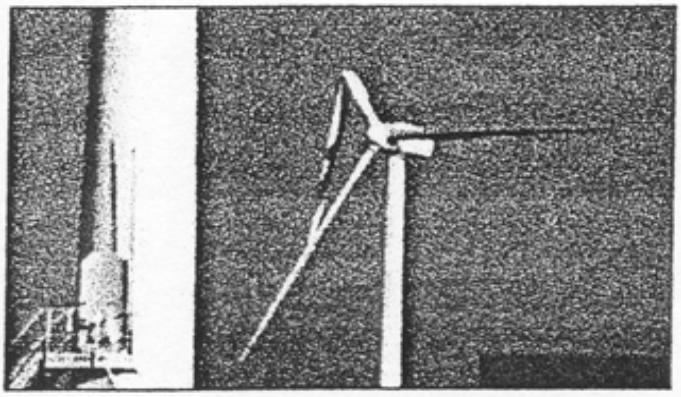
Wednesday, 23 January, 2002, 12:23 GMT

Wind farm closed after blade snaps



The blade sits at the top of a 93-metre-high column

A turbine propeller blade has folded in half at the UK's first electricity-generating offshore wind farm, at Blyth, in Northumberland.

It will not be known until data are gathered from a companion turbine whether high winds in the region are to blame for the breakdown.

The turbine operators, Amec Wind, hope to carry out an investigation with the unit's Danish makers, although bad weather has so far hampered plans for an inspection.

Small boats have been warned to stay away after a blade on one of the two 93-metre-high turbines snapped.

'Not pessimistic'

Dr Chris French, a lecturer in marine electrotechnology at Newcastle University, said it could be a long and tricky job to fix the blade.

Dr French told BBC News Online: "Before there is any attempt to take anything off, they will want to look at some of the data that come back from the instrumented turbine.

"I would also think a huge crane barge will be needed to come alongside to carry out the repair work.

"They are going to

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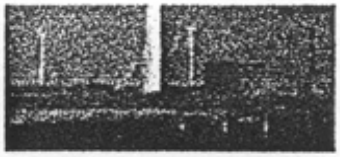
have to wait for a suitable gap in the weather before work can start.


Small boats have been told to stay away

"I cannot believe the turbines would have been installed without stress testing being carried out first, so I suspect a materials abnormality.

"These are the first offshore wind turbines of their type in the UK, if not the world, so we should not be too pessimistic about what has happened."

The turbines were opened in December 2000, just under a kilometre off Blyth, in a £4m operation by Hexham company Amec Wind.

The turbines were switched off when the fault was discovered, and an inspection by makers Vestas of Denmark is due on Wednesday.

An Amec spokesman said that although there had been windy weather no cause of the fault had yet been determined.

The turbines, opened by Energy Minister Helen Liddle, can generate enough power for 3,000 homes.

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Change is in the air as Britain

Almost 200 years after the poet William Blake wrote of England's 'dark satanic mills', a new form of industry is raising similar passions in a land trying to be green and pleasant. Herald Correspondent **Peter Fray** *reports from London.*

After almost a decade of dilly-dallying, the British Government has embraced wind power and other forms of renewable energy with a passion more commonly found among the greens of Denmark and Germany.

For the first time, it has proposed taking both carrot and stick to the local energy industry, which, until recently, has been slow to develop wind and other alternative power supplies. The Government aims to have 10 per cent of Britain's energy supplied by renewable sources by 2010 and is considering raising the target to 20 per cent by 2020.

By doing so, it hopes to create a new industry (in Denmark, wind power employs 15,000 people and is worth $A12 billion a year) and meet its obligations to reduce greenhouse gas emissions under the Kyoto and Bonn agreements.

Part of its strategy is to prod power producers into using green fuels. From April 1, companies that decline to use so-called alternative energies will in effect pay about $90 a megawatt hour extra for the fuel supplies, up to twice the price paid by those that do.

At the same time, the Government has earmarked a further $780 million over three years for research and development of alternative energy.

Presently about 1 per cent of British power comes from renewables, but – prompted by the market stimulus, and other proposals recently flagged by a government policy paper – a gold rush mentality has developed.

More than 180 companies are involved in wind power, up from just a handful 10 years ago. This includes several leading power utilities, including British Energy, the country's largest nuclear power provider. But wind power is also attracting vehement criticism from climate change sceptics.

Philip Stott, a professor of biogeography at the University of London, has called for a halt in the proliferation of wind farms on environmental grounds.

"In the name of climate change, we are about to cover the landscape of the Cotswolds, Scotland, Wales and East Anglia with great whirring wind farms. It is dreadful visual pollution," he said.

"I am entirely in favour of diversification of energy sources, but it mustn't be done as a knee-jerk reaction or where it in itself has serious environmental downsides."

Professor Stott is a member of the European Science and Environment Forum (ESEF), a group of 11 leading international academics, which this week questioned the scientific assumptions and modelling behind the global warming debate. "People have forgotten climate change is the norm," he said. "Global warming has become a powerful myth."

ESEF argues that the United Nations Intergovernmental Panel on Climate Change, the key policy driver of the Kyoto process, has based its warnings on

rethinks energy policy

Australian-born Megan Arnold with a model of the giant wind turbine her company will build in Lowestoft. Photo: Ted Blackbrow

erroneous computer models and inadequate or incomplete scientific data.

Myth or not, the threat of global warming coupled with government support is pushing many European nations away from coal, gas and nuclear energy – and towards wind and less-developed wave, solar and tidal energy.

Up to 50 million people across the continent – five times more than at present – will be boiling their kettles on a breeze within 10 years, according to industry estimates.

Over the next year alone, the output of British wind farms will increase by 40 per cent, from 475 mW to 675 mW. This will take the number of homes potentially powered by wind from 323,000 to more than 550,000, a city of about the combined size of Canberra, Hobart and most of Darwin.

The British Wind Energy Association says a further 900 mW worth of turbines are at the planning stage, and due to start operation within two to three years. They will provide enough power, when combined with the existing output, to fuel Manchester (or Brisbane or Perth).

As technology – pioneered by the Danes – has made producing a wind turbine cheaper, the cost of a unit of wind power has fallen. Official figures put the most costly wind, at about 9¢ a kilowatt/hour, on a par with coal, and about 25 per cent dearer than gas.

And then there is the new frontier. There are 18 proposals for offshore wind farms on Britain's coastal waters before the Government. One company, Powergen, has revealed plans for a wind farm in the Thames estuary that could produce up to 500 mW. "The really big capabilities lie offshore," Ms Hill said.

A company in Lowestoft in Suffolk plans to build the world's largest single wind turbine, as a prototype for those offshore wind farms of the future. At 150 metres from base to blade tip, the turbine will be about half the height of the Eiffel Tower, and be visible for kilometres around the East Anglian countryside.

SLP Energy's Australian-born business development manager, Megan Arnold, a former Greenpeace worker, said: "I have always believed that business and industry can learn from the environmental movement and vice versa. The wind industry is much more advanced than a lot of other renewable energies."

SLP is a case in point. For 30 years, it has supplied engineering work for Britain's North Sea oil and gas industry. But as opportunities there decline it has been forced to looked elsewhere.

It plans to use the Lowestoft turbine as a learning exercise and to attract other projects. Britain is the windiest country in Europe, Ms Arnold said. "The UK has an enormous resource."

More nuclear power 'only way to reach Kyoto targets'

London: Britain needs to build new nuclear power stations to stand any chance of meeting its Kyoto greenhouse gas emission targets, the Blair Government's chief scientist has said.

On the same day the Government took its first step to ratify the Kyoto treaty on global warming, David King said nuclear power was the only short-term alternative to fossil fuels if Britain was to avoid an energy deficit.

Professor King is a strong supporter of renewable energy sources, such as wind power, which the British Government says will supply 10 per cent of the country's needs by 2010.

But he said at the launch of National Science Week that all Britain's efforts on renewable energy would be wasted "if we don't rebuild nuclear power stations".

"We will be at a standstill in our fossil fuel dependence in 20 years' time," he said.

Britain's 15 nuclear power stations provide 27 per cent of the country's electricity, but that is expected to fall to below 10 per cent over the next 20 years, as stations are run down and go out of service.

Anti-nuclear campaigners say nuclear power is unsafe and creates environmental problems associated with the disposal of nuclear waste.

The Government is considering a plan to extend the renewables target to 20 per cent by 2020, but has not closed off a revival of the country's nuclear industry. Professor King's support for nuclear power is seen as a signal of the Government's policy intentions.

The Environment Secretary, Margaret Beckett, presented the Kyoto treaty to Parliament on Thursday, in the first stage of a 21-day ratification process. The treaty commits Britain to cut greenhouse gas emissions to a minimum of 12.5 per cent below their 1990 levels by between 2008 and 2012.

The European Union said recently that all 15 member states, including Britain, would ratify the treaty by June.

Peter Fray

►► COASTAL COMMUNITIES AT LOGGERHEADS

Generations: John and Jan Denham.

Farm is gone with the wind

By ZOE SKEWES

THE old adage that beauty is in the eye of the beholder has never rung truer than when considering the sale of Victoria's only operational wind farm.

After several years on the market, the south-west Victorian property that houses eight of the 14 turbines making up the Codrington Wind Farm, finally sold for $4200 a hectare.

According to Elders VP Warrnambooi agent Nick Adamson, it was the turbines that generated a lot of buyer interest for the 240ha property.

"The wind turbines added another dimension to the income potential of the property, making it a sound investment for buyers," he said.

And while the turbines probably didn't increase the price of the property, they did increase interest in the sale, Mr Adamson said.

But the owners are not so sure.

John and Jan Denham say they have regrets about allowing turbines to be built on their property and entering into a 30-year lease with Pacific Hydro.

They are among the objectors to the proposed wind farms in nearby Yambuk.

The Denhams say they had been driven by "self-interest" when they agreed to lease the land to Pacific Hydro, a decision they now regretted.

They say the turbines are noisy — like the sound of heavy traffic — killed birds, including one falcon a week for the first two months, and affected farming practices.

While the property is now well known for its distinctive wind turbines, it was once renowned for something much less environmentally friendly.

About 40 years ago, when the Denhams brought the property, it was so infested with rabbits the locals used to refer to it as the "rabbit farm".

A 1967 report on the property in *The Weekly Times* noted that John's efforts to transform the land were hindered by the effect of local winds.

The article mentions the "strong prevailing south westerly winds" that presented a real and constant danger of erosion.

But John's efforts to transform the land into a beef farm have been remarkable. Paddocks that were once controlled by thousands of rabbits are now dominated by the turbines in what is now established grazing country.

Gerda Ackermann
Oberer Hirnberg 15
55767 Oberbrombach

Iris Drews
Milower Weg 14
17337 Lübbenow

Eva Schindler
Sellbachstraße 9
67701 Schallodenbach

Dr. Horst Reichel
Flachsberg 10
29229 Celle

To the
Politically Responsible Parliamentarians
and the Competent Administrative Authorities
at the Federal -, State -, and Municipal Level

Celle,
9th Nov 1999

Ladies and gentlemen:

Under the pretence of an ecologically and economically sensible energy policy the exploitation of wind energy in the Federal Republic of Germany is being advanced by the installation of thousands of wind turbines - primarily on the coast, but now increasingly also in the interior of the country. Yet the arguments given in support of this do not in the least bear critical reflection! In reality, it is a matter of the wind industry pushing commercial interests through, to the detriment of the general public.

Throughout Germany, citizens immediately suffering from the harassments from wind turbines as well as opponents of the industrial deformation of our natural regions have integrated into over three hundred citizens' action committees and action groups to stop this disastrous development. Behind the subscribers to the resolution there is a steadily growing army of opponents of the exploitation of wind energy through wind turbines. From the numerous reports in the media it can be inferred that the acceptance of the exploitation of wind energy is constantly decreasing among the population!

With the enclosed resolution the subscribers are addressing the public in order to point out the impairments emanating from the wind turbines and to make clear that the arguments furnished by the operators of the wind turbines are absurd in terms of energy policy.

We are calling upon all politically responsible persons and the decision makers at the administrative authorities to stop the construction of wind energy plants, that are unacceptable to large parts of the population, and to promote different, gentler ways of winning energy - also through renewable energies.

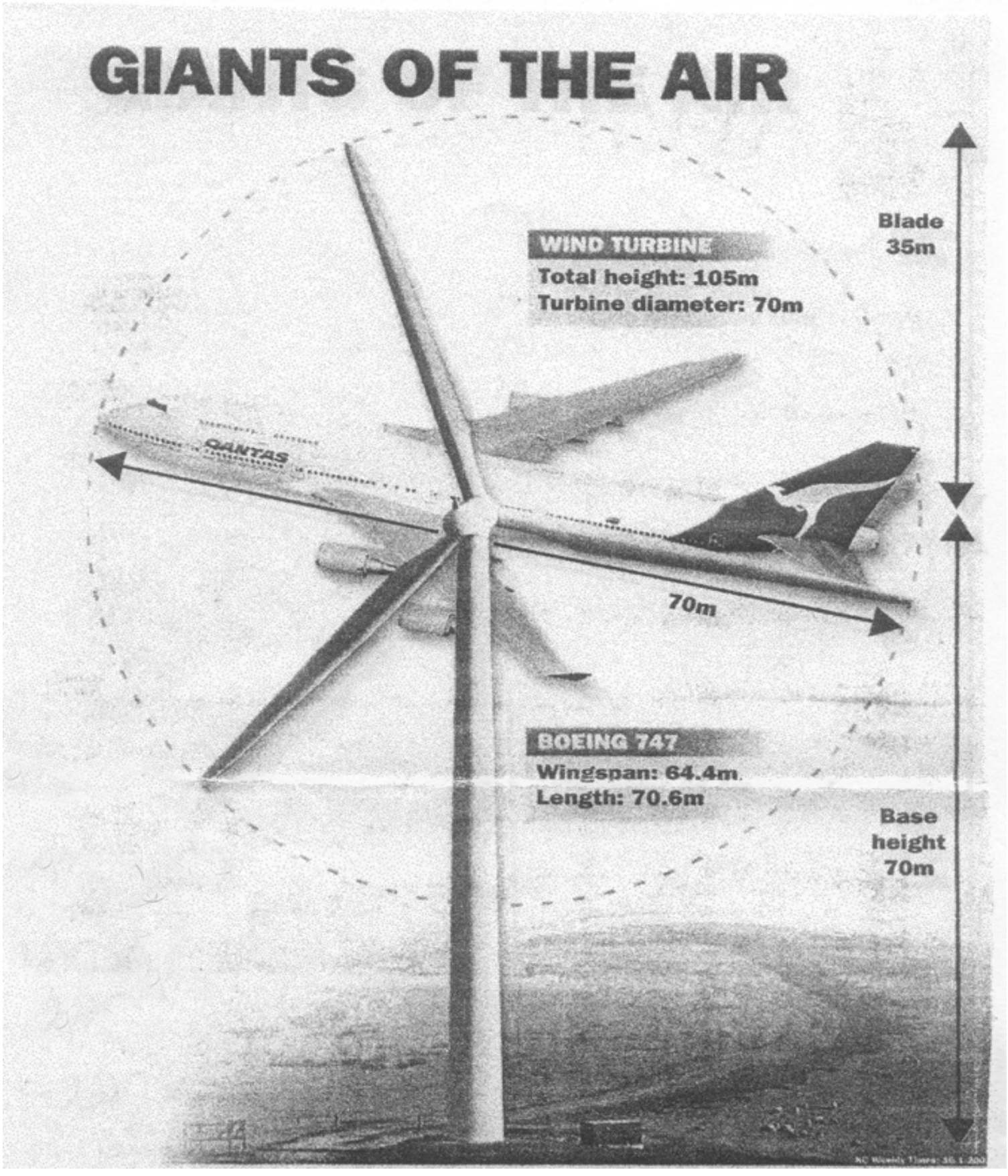
In the name of all subscribers to the resolution

(sgd Dr. Reichel)

Resolution of the Citizens' Action Committees against Wind Turbines in Germany

►► COASTAL COMMUNITIES AT LOGGERHEADS

sweep the coast



THE LAND ■ Thursday, February 28, 2002

Hot air on wind power

A FASCINATING story in Britain's *Daily Telegraph* newspaper that puts the skids under the concept of wind-generated electricity serves as a timely warning for any future venture of this ilk.

Waiving of local authority requirements, or steamrolling of planning permission required to establish this fledgling industry, almost certainly shouldn't be allowed.

The reality is these monster turbines have proved "ludicrously expensive" in Denmark.

That country now produces 13pc of its electricity from these "wind farms" but has now called a halt to the project in the light of much higher electricity prices than in Britain.

Also torpedoed is the notion that the industry is environmentally friendly.

The windmill projects have yielded no reduction in greenhouse gases, largely because they have been negated by emissions generated during their construction, plus they require to be backed up by other forms of power generation.

And the revolving blades on one wind farm in California killed 300 redtail hawks and 60 golden eagles in one year alone. Ouch.

■ Our Toowoomba-based machinery editor, Graham Fuller, is on assignment in the UK.

Objectors warn over power play

By MONICA JACKSON

FIFTH-generation Fish Creek dairy farmers Tim and Andrew Farrell believe wind farms will destroy their community.

Far from creating jobs, they say the wind farms will destroy the $30 million eco-tourism industry, devalue properties and halt any further subdivisions and developments.

Socially, they say the issue has divided the community and led to numerous cases of verbal and physical abuse and frequent abusive phone calls.

Tim said one wind farm opponent received threats to burn down his house, was spat on and constantly slandered.

The Farrells are far from convinced wind farms will create new jobs or contribute to any real decrease in greenhouse emissions.

Tim said wind farms were little more than a facade to allow energy companies to obtain their green credits, which in turn would allow them to increase their production of greenhouse gasses with conventional means.

Not in my backyard: Andrew Farrell, Tim and Liz and baby Aaron claim eco-tourism will be destroyed by wind farms near Wilsons Prom.

Picture: GREG SCULLIN

But the claims were denied by Pacific Hydro, one of the largest wind farm companies, which has plans for 15 wind farms in Victoria.

Managing director Jeff Harding said most people supported wind farms.

He said an independent survey held in Portland showed 75 per cent of people thought the turbines looked "graceful" and 84 per cent disagreed that they were ugly.

Mr Harding said 90 per cent of people supported the farms.

"It is a visual issue debate and at the end of the day we live in a democratic society," he said.

Mr Harding said wind farms would create regional employment — where it was badly needed — and clean energy.

Farmers would receive an income from having the turbines on their land and Victorians would be active participants in creating clean energy.

"The reality is that we rely on electricity. You can make electricity by burning filthy coal, building big dams or by wind generators," Mr Harding said.

But Tim said if the community was serious about reducing greenhouse gasses, more efficient and viable alternatives needed to be used.

"We are all in favour of green energy and, like many country people, we are the ones who often invest in such technologies," Tim said.

He said there were hundreds of kilometres of coastline where these projects were appropriate, but the Victorian coastline was not among them.

The Farrells also worry that allowing the wind farms along pristine coastline will give a green light to industrial developments such as Basslink and Esso's oil exploration plans for Corners Inlet.

"People fought Basslink on aesthetic grounds. If we allow turbines here, we will lose this," Tim said.

His brother, Andrew, who runs the family's dairy farm and owns the Fish Creek pub, wants to know how much compensation the State Government is prepared to pay rural communities for losing tourism.

"It's sheer hypocrisy to destroy our environment in the name of green power," he said.

Winds of war lash the coast

DEATH threats, people being run off the road, clandestine meetings, secret dealings, pay-offs and political bribes.

One Gippsland farmer was even sent a pre-paid funeral.

No, it's not a Mafia invasion or an outbreak of local gang wars.

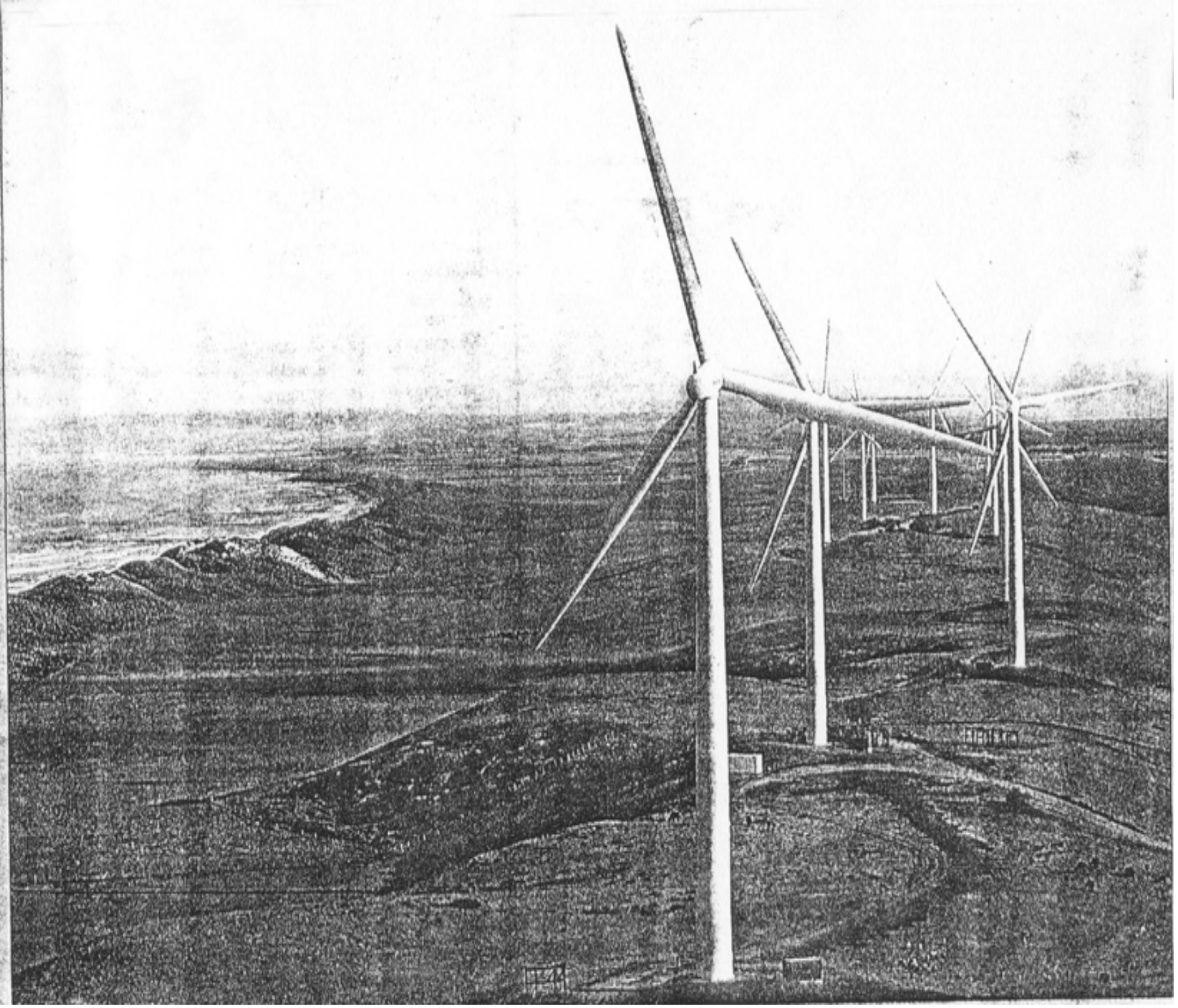
It's the arrival of wind farms.

Coastal communities across Victoria are at loggerheads over plans by power companies to dot the countryside with massive wind turbines.

Supporters say they are a valuable source of green energy.

Opponents say they are a blight on the landscape.

Special report, Pages 4-5.



►► COASTAL COMMUNITIES AT LOGGERHEADS

Winds of war

Wind farms are stirring up trouble around the state. MONICA JACKSON reports

DEATH threats, people being run off the road, clandestine meetings, secret dealings, pay-offs and political bribes.

One Gippsland farmer was even sent a pre-paid funeral.

No, it's not a Mafia invasion or an outbreak of local gang wars.

It's the arrival of wind farms.

At first, the world seemed all for them.

They were seen as a clean and viable energy alternative and a great way to build up carbon credit points.

Last year, the Federal Government introduced legislation requiring at least 2 per cent of energy to be produced through renewable energy, echoing the sentiments of the Kyoto agreements.

And last weekend, the Victorian Government reconfirmed its commitment to the wind farms by announcing it was preparing new guidelines for the renewable energy sector.

Nothing in the long history of Victoria's coastal towns has caused as much disquiet as these seemingly benign beasts.

In the few months, during which giant multi-nationals, such as Pacific Hydro, Meridian Energy (Reap Wind), Wind Power and Stanwell Corporation, have been active in finding sites for their turbines, war has broken out.

Farmer is pitted against farmer. Those who have been offered money — said to be between $5000 and $10,000 a year — to have the turbines on their property object to those who don't want them.

Angry residents in Toora, Welshpool, Fish Creek, Yambuk and Cape Bridgewater are demanding their coastline be spared an invasion of the unsightly turbines.

In South Gippsland, a council decision to allow a 12-turbine wind farm in Toora and open policy towards wind farms in the region, prompted one of the most heated public meeting seen in the region.

Late last year, more than 250 people gathered in Foster to protest against the South Gippsland Council's handling of the wind farm situation.

Many called for a vote of no-confidence in the council.

The group demanded a moratorium on wind farms and wind monitoring towers in the Wilsons Promontory area.

Welshpool resident Trixy Allott blamed the companies for causing community division.

Instead of informing the whole community about their plans, the companies went straight to farmers and asked them to sign secret agreements, she said.

In Western Victoria, the fight between those who want wind farms and those who don't is just as bitter.

Opposition to Pacific Hydro's Portland Wind Energy Project is strong, especially around Yambuk and Cape Bridgewater, where a previous attempt to establish a wind farm was defeated at the Victorian Civil and Administrative Tribunal.

Yambuk resident Brendan Fitzgerald said Pacific Hydro's plan to put 20 turbines around Yambuk would devastate the region. "It's a wetland and heritage-listed area with more than 150 different species of birds," he said.

But according to Moyne Shire planning and environment director Greg Anders, the number of people who support wind farms in western Victoria outweigh those who don't.

Mr Anders said there had been extensive public consultation for the Portland project and the company had asked for an independent panel inquiry to establish guidelines.

The panel, due to report to Planning Minister John Thwaites on April 4, consists of planning experts Rynd Smith, Elizabeth Jacka and Dr Graham Redding.

The Weekly Times, January 16, 2002

Winds of war

In the meantime, dozens of potential sites continue to be identified along the Victorian coast, although details are sketchy and often kept well under wraps.

Pacific Hydro has plans for a further 120 wind generators on four sites at Yambuk, Cape Bridgewater, Cape Nelson and Cape Sir William Grant, at a cost of $300 million.

The company also plans to build two wind farms in the Challicum hills between Ararat and Beaufort, including one of 50 turbines.

Queensland company Stanwell Corporation was given the go-ahead to build the Toora wind farm and wants to build another in Nirranda, just off the Great Ocean Road.

Planning Minister John Thwaites said the guidelines would form part of the Government's commitment to accelerate green energy.

Mr Thwaites said a "high level" committee representing the departments of environment and conservation, energy and resources, planning and state and regional development would draft the guidelines.