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## **Senate committee of enquiry Into the Social & Economic Impact of Rural Wind Farms**

### **Introduction**

A brief look at some early wind turbine developments in Victoria might be useful. In order to gain some understanding of the current problems associated with inappropriate wind turbine installations in rural Australia.

Some years ago the European wind turbine manufacturing industry set out to target Victoria in the first instance in an effort to expand their overseas wind turbine sales in Australia. The then Bracks Government, seeking to promote its green bona-fides, set out to assist by promoting the activity using RECS under the Commonwealth Mandatory Renewable Target (MRET) which might make wind turbine installations financially viable.

The groundwork was therefore quickly, albeit carefully, prepared for what was to follow. The Bracks Government, in conjunction with the European wind turbine industry who had considerable experience in such matters, hastily cobbled together a set of guidelines known as the ***Policy and planning guidelines for development of wind energy facilities (WEF) in Victoria.***

Hidden within the Guidelines was a reference to an obscure additional set of Guidelines sourced from New Zealand relating to noise measurements known as ***The Assessment And Measurement Of Sound From Wind Turbine Generators NZS.6808-1988.***

This had significant ramifications since it meant that the the more stringent ***Interim Guidelines for Control of Noise from Industry in Country Victoria N3/89*** based on ***SEPP N-1*** would no longer apply in the case of wind turbine installations in rural Victoria.

The negative effects from wind turbines of ***Noise, Shadow Flicker, Blade Glint and Landscape Blight*** would therefore be set aside in favour of promoting Green Energy as a political construct.

The end result was that wind turbines could be installed anywhere in Victoria outside of National Parks.

### **Toora Case Study**

One of the first areas targeted in rural South Gippsland was Toora which for planning purposes at the time was under the control of the South Gippsland Shire Council. The Council fitted into the profile and template developed by the European wind turbine industry whose criteria for dealing with such organisations might reasonably be explained as follows:

- be easily manipulated
- be realitively unsophisticated
- have a poor technical understanding of wind turbine technology
- be made to feel important
- see the possibility of huge rate revenues
- impressed by new exciting green technology
- see the possibility of massive job opportunities
- be helping to save the planet

In short order, the then South Gippsland Shire Council set itself the task of making South Gippsland the centre of the wind energy business in Australia.

The wind turbine industry in conjunction with the South Gippsland Shire Council and after secret negotiations with local host landowners set about gaining approval for the Toora wind energy facility.

Objections from local land owners who would be adversely affected by the project were quickly squashed by the State Government Authority VCAT with the assistance of the Council.

The Toora Wind Energy Facility at Silcocks Hill which is located on the rim of an amphitheatre overlooking the Toora Ramsar listed Bird Sanctuary and Wetlands and Wilsons Promontory National Park is a classic example of landscape blight , poor location and little or no understanding of the appropriate placement of such devices

The Toora wind energy facility comprises some 12 wind turbines each 110 metres in height from ground to blade tip. The radial speed at the tip of the rotor blades on the circumference at normal rotating speeds is in excess of 300 kilometres per hour or approximately 83 metres per second.

The facility is located in the closely settled hills area of South Gippsland, some of the turbines being situated within 350 metres of neighbouring non- host properties.

The turbines are located on the sides of hills and along ridge lines and so disposed, inevitably, to catch and reflect morning sunrise eastwards risings and afternoon westwards sunset progressions and settings.

As a further transgression in an offence to the eye, the developer placed a number of turbines in direct line of sight to the outlet of a scenic gorge known as the Agnes Falls - Victoria's largest free fall waterfall.

The turbines are located in the known habitat of the wedge tailed eagle who use the thermals around Silcocks Hill to assist with their activity.

**Footnote.**

In the years following the Toora wind turbine installation a number of residents with properties close to the wind turbine facility presented to the Foster Medical Centre seeking treatment for some disorders alleged to be due to noise and other factors associated with the facility.

The operating company denied any responsibility. However some of the affected properties were subsequently bought out by the operating company and demolished. Locked gates were erected to prohibit access to the properties.

The operating company subsequently sold out to another company and departed from Toora.

In an area that would normally be considered prime real estate because of intrinsic scenic values and being of little agricultural worth, the rate base of the area has stagnated and collapsed as a consequence of the wind turbine facility.

The South Gippsland Shire Council has effectively abrogated their responsibilities as the Responsible Authority for Noise Compliance oversight at the facility on the grounds that they do not have the finances or expertise to do so.

There is no State Government monitoring Authority in place to assess the damage to birdlife from the facility

The State Government of Victoria granted exemption to wind turbine energy facilities from the requirement to pay full Municipal rates at an Industrial facility rating level.

There were to be no job opportunities at the facility. The wind turbines and switching gear were sourced from Europe. The support towers and rotor blades were sourced elsewhere in the state.

Construction of the facility was done by contractors outside the region and even sands and gravels required for the onsite concrete batching plant were carted in from outside the region.

## **Conclusion**

A detailed discussion of the efficacy or otherwise of wind energy facilities in the provision of stable and reliable electricity generation are outside the scope of this submission.

However it can reasonably be said that an analysis of the effectiveness of wind energy as a power generation and distribution source is a relatively simple technical task and must form the basis of a separate Senate Enquiry.

Given that the electricity consumer is now paying progressively more for their electricity; a more transparent analysis of wind turbine electricity generation is required.

## **Recommendations or suggestions:**

- mandatory minimum 2km set-back of each independent wind turbine from non host residences
- mandatory independent noise measurement authority to control rogue noise transgressions from facilities
- real-time continuous wind turbine facility power availability measurement to be made available on-line on a public domain website
- real-time continuous wind turbine facility power delivered to the grid in MWh to be made available on-line on a public domain website
- areas of intrinsic landscape beauty and values to be declared no go zones for wind turbine installations

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