

**Submission
No 117**

INQUIRY INTO RURAL WIND FARMS

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Office of the Renewable Energy Submission

to

The Inquiry into Rural Wind Farms

Background

The Office of the Renewable Energy Regulator (ORER) is a statutory authority established by the Commonwealth Government in 2001 to oversee the implementation of the Australian Government's Mandatory Renewable Energy Target (MRET).

From 1 April 2001 to 8 September 2009 the scheme established by the *Renewable Energy (Electricity) Act 2000* (the Act) was known as the MRET. The legislation provides an incentive to generate an additional 9,500 Giga Watt hours of renewable electricity per year by 2010 by establishing a supply and demand for Renewable Energy Certificates (RECs) and a REC market.

An amended Act came into force on 9 September 2009 and consequently the measure is now known as the Renewable Energy Target (RET). The amended Act incorporates new legislative requirements and an expanded target of an additional 45,500 Giga Watt hours (20 percent) of renewable electricity per year by 2020.

Submission

Participation in the RET is a two-step process. Firstly, the applicant (owner or operator of a power station) must seek to have the power station accredited as the Act establishes a necessary relationship between the ORER and a generator of electricity. This is essentially an infrastructure test and the Act and Regulations list a range of criteria that must be addressed prior to applying for accreditation. An applicant must be able to identify the components of the power station and the eligible renewable energy source(s) that will be used in the power station, and comply with any other prescribed requirements. The prescribed requirements cover metering and Commonwealth, State, Territory and Local government approvals.

The second process relates to the eligibility for RECs. RECs can only be created once generation has occurred. They will only be validated by the ORER if the criteria specified in the Regulations can be shown to be passed for every megawatt-hour (MWh) of electricity claimed as a REC and records are available for ORER's verification. 1 REC = 1 MWh of eligible renewable electricity generated by an accredited power station.

The ORER's submission to the Legislative Council includes the following key points for the role of energy generated by wind farms to date in relation to the RET, which may be useful in predicting the potential future role:

- The Act lists 19 eligible renewable energy sources under section 17(1) of the Act and one additional source of 'waste coal mine gas' under section 17A of the Act for the generation of additional renewable electricity by the accredited power stations under the Act for participation into the RET.

- The additional renewable electricity can be generated by the eligible renewable energy sources under section 17(1) of the act until 2030 whereas the additional electricity generated from the 'waste coal mine gas' is for a finite period from 1 July 2011 to 31 December 2020.
- The proportions of each renewable energy source contribution to the expanded RET are not known at this stage, it has been speculated by analysts that wind, solar water heaters, bioenergy sources (including landfill gas, bagasse, wood waste, black liquor) and geothermal energy will be the main contributors and sufficient renewable energy sources are available to meet the expanded RET
- Currently (as of 30 October 2009) there are 46 accredited wind farms in Australia which are participating the RET. The yearly breakdown of wind farms by their year of accreditation is: 10 in 2001, 5 in 2002, 4 in 2003, 5 in 2004, 7 in 2005, 1 in 2006, 6 in 2007, 3 in 2008 and 5 in 2009 until October 2009.
- Of the 46 wind farms accredited by the ORER for participation in the RET scheme, only 2 were operating prior to 1997.
- Of the 46 wind farms accredited by the ORER for participation in the RET scheme, 6 are located in New South Wales.
- Of the 46 wind farms the largest single accredited wind farm has an installed capacity of 192 MW.
- The installed capacity of various accredited wind farms on yearly basis is: 72 MW (2001), 140 MW (2002), 39 MW (2003), 128 MW (2004), 329 MW (2005), 79 MW (2006), 456 MW (2007), 2 MW (2008) and 482 MW until October 2009. The total installed capacity is 1,727 MW as of 30 October 2009.
- The number of RECs from wind as a proportion of RECs create from all eligible renewable energy sources has increased from 7.39% in 2001 to 62.16% in 2008. The yearly ratios are 10.50% (2002), 8.97% (2003), 28.75% (2004), 34.55% (2005), 41.18% (2006) and 51.76% (2007).
- The ORER is not in a position to advise the locations for potential wind farms in Australia. However, some other government agencies and/or wind associations might be in a better position to provide information on this issue.
- While the ORER does not dictate where a wind farm is located in Australia, however it seeks assurance from the applicant that relevant Commonwealth, State/Territory and Local building and environmental approvals are obtained to minimise residential and environmental impacts.