

## 3 February 2011

Department of the Senate PO Box 6100 Parliament House Canberra ACT 2600 Australia

By email: community.affairs.sen@aph.gov.au

Dear Sir/ Madam,

## **RE: Social and Economic Impact of Rural Wind Farms**

Thank you for the opportunity for Hydro Tasmania to provide a submission to the Senate Inquiry into the Social and Economic Impact of Rural Wind Farms.

As the largest generator of renewable energy in Australia and as a participant in the National Electricity Market (NEM), the policy and regulatory environment enabling future wind development in Australia is a key issue for Hydro Tasmania. Hydro Tasmania recognises the need to reduce Australia's current and future emissions and the significant role that the energy sector must play in this transition.

Hydro Tasmania supports effective policy and regulatory measures that will reduce Australia's future emissions below that which would be realised under business as usual conditions. Facilitated by a sound planning approvals framework and through effective complementary policies (such as the national Renewable Energy Target and a future price on carbon) wind power developments can positively contribute to the social, environmental and economic well-being of rural and regional Australia.

Hydro Tasmania owns and operates the 2.45 MW Huxley Hill Wind Farm on King island (originally commissioned in 1998) and is a fifty per cent owner of Roaring 40s with joint venture partner China Light and Power. Roaring 40s wind farms currently include:

- Woolnorth (140 MW) TAS, commissioned 2002 2007:, 62 Vestas Turbines
- Cathedral Rocks (66 MW) SA, commissioned in 2007: 33 Vestas V80 2 MW turbines
- Waterloo (111 MW) SA, commissioned in 2010: 37 Vestas V90 3 MW turbines
- Musselroe (approximately 168MW) TAS, currently under development; as well as
- A R40s project pipeline of over 400MW.

As a major participant in Australia's wind industry and in response to the inquiry's terms of reference, Hydro Tasmania would like to make the following key points:

- Increased deployment of wind farms will further displace fossil fuel generation and reduce the emissions intensity of Australian electricity generation
- Wind power is currently the lowest cost form of large-scale renewable energy. Much
  of the growth in renewable energy required to meet Australia's national 20%
  Renewable Energy Target (RET) is expected to come from wind energy. The RET will
  unlock more than \$20 billion in investment and create many jobs
- In 2009-10 alone, wind energy in Australia generated just under \$1.6 billion in investment (Bloomberg, New Energy Finance, 2010)
- Current Australian state and federal approval standards for wind farm development are already among the most stringent in the world
  - Any potential impacts on surrounding flora or fauna are carefully assessed and managed or mitigated accordingly
- Modern wind turbines operate within accepted thresholds for both low frequency noise and infrasound
- Investigations into the health effects on people living in close proximity to wind farms have found no evidence of adverse impacts
- There continues to be extensive support for wind farms within Australia including in regional areas such as NW and NE Tasmania.

Hydro Tasmania has over 10 years of involvement in the wind industry. Globally wind power is one of the fastest growing sectors with growth rates in the order of 30 per cent per annum.

From an emerging fuel source twenty years ago, wind energy has mushroomed into a mature and booming global business. Generation costs have fallen dramatically over the last 15 years, moving closer to the cost of conventional energy sources. Modern wind turbines have improved dramatically in their power rating, efficiency and reliability.

There is huge and growing global demand for emissions-free wind power, which can be installed quickly, virtually everywhere in the world.

Over the past ten years, global wind power capacity has continued to grow at an average cumulative rate of over 30%, and 2008 was another record year with more than 27 GW of new installations, bringing the total up to over 120 GW. The United States passed Germany to become the number one market in wind power, and China's total capacity doubled for the fourth year in a row.

Global Wind Energy Council <a href="http://www.gwec.net/index.php?id=13">http://www.gwec.net/index.php?id=13</a>

Hydro Tasmania believes that as a low cost renewable energy technology, wind power can make a pivotal contribution toward Australia meeting its renewable energy target and transitioning toward a low-carbon economy. Effective policies are required to support the development of all infrastructure projects and while regulatory controls are essential to ensure appropriate development the goal must be to facilitate appropriate new development not to deter it.

We would welcome the opportunity to provide the Inquiry with further information about the contents of this submission. Should you have any queries or require further information, please contact Alex Beckitt or Colin Wain

Yours sincerely

Roy Adair CEO Hydro Tasmania