

Submission No: ..

15 June 2007

The Committee Secretary House of Representatives Standing Committee on Industry and Resources PO Box 6021 Parliament House **CANBERRA ACT 2600**

By email: ir.reps@aph.gov.au

Dear Sir/Madam

Re: Inquiry into developing Australia's non-fossil fuel energy industry

Background

Pacific Energy Limited is a renewable energy generation and project development company listed on the Australian Stock Exchange (ASX code: PEA).

Pacific Energy's corporate growth strategy is predominantly focused on the operation and development of hydro-electric and biomass renewable energy generation facilities in Australia and the United States.

The Company owns and operates two hydro-electric power stations in the State of Victoria, Australia. Both of these power stations hold long-term water rights and electricity off-take contracts providing the Company with stable long-term cash flow.

Further, Pacific Energy is advancing the development of two significant 'base load' biomass renewable energy generation facilities in Perth, Western Australia and New Jersey, USA.

The Company's head office is located in Perth, Western Australia and it has regional offices in Melbourne, New Jersey, Hong Kong and Jakarta, Indonesia.

Terms of Reference (ToR)

Pacific Energy supports the House of Representatives Standing Committee on Industry and Resources inquiry into the relative state of development of selected renewable energy sectors in Australia. However, we are concerned and disappointed about the omission of biomass fuelled power stations given their status as a 'proven' renewable energy source from the ToR.

We believe that the Committee should seek to extend its ToR to include biomass fuelled renewable energy generation in its considerations for Australia's renewable energy industry.

The reasons for biomass to be included are as follows:

Recent increases in the cost of fossil fuel and resultant increase in the market price of electricity have enhanced the economic viability of biomass energy solutions in Australia.

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- The generation of renewable energy from timber plantation residue (type of biomass) is a proven renewable 'base load' electricity infrastructure solution with a number of existing power stations operating in the United States and Scandinavia.
- Biomass, generally, is organic matter originally derived from plants, produced through the process of photosynthesis and which is not fossilised (such as coal).
- Biomass resources include wood residues from the harvest of plantation forests, residues from agricultural and tertiary timber industry and organic waste streams from other industry processes. These waste residues are usually burned 'in situ' (in the case of plantation residues) or disposed of to landfill. These disposal solutions are significantly more environmentally deleterious than if used as a biomass renewable fuel.
- Biomass to energy is a unique form of renewable, energy. Biomass to energy infrastructure and process technology can deliver long-term 'base load' electricity requirements in capacity increments of between 10-70MW.
- Bioenergy is renewable and carbon neutral. Carbon dioxide released during the energy conversion of biomass would otherwise be released as carbon dioxide or methane under existing disposal methods including 'in situ' biodegradation.
- Biomass fuels have almost no sulphur content and therefore produce very little sulphur dioxide, which causes acid rain.
- The use of agricultural residues, forestry residues and municipal solid waste for energy production is an effective use of waste resources, reduces the problem of waste disposal and eliminates the production of methane (21x the greenhouse impact of CO₂) generated when this matter disposed to landfill or left 'in field' to biodegrade.
- There are a variety of well proven combustion technologies used worldwide and more
 efficient gasification plants currently in demonstration stage that offer potential for
 significant renewable energy cost reductions.

Biomass - wood waste

Pacific Energy has examined and studied the use of wood waste/timber plantation residue as a fuel for electricity generation. Competitive prices for electricity are achieved when wood waste/timber plantation residue is available in both economic quantities and price, and is within an economic logistical distance of the power station.

Plantation residue fuelled power stations are more labour intensive than other renewable energy solutions providing for a significantly greater employment opportunities for constituents.

Given that biomass (particularly timber plantation residues) has been adopted as mainstream fuel for electricity generation, in Scandinavia and the United States, the Committee is encouraged to reconsider the exclusion of biomass from the ToR.

Government role

The specific areas where the Government can assist in the development of a viable and economic renewable energy industry include:



- Expanding the MRET Scheme in terms of the 9,500GW limit, the term (expiring in 2020) and the pricing of penalties (\$40/MWh). This would enhance project viability and improve the current and future 'affordability' of renewable energy beyond the remaining MRET term which expires in 11 years.
- A total waste disposal policy that effectively reflects the 'full' cost of the disposal of organic waste residues to landfill or other, including environmental costs based on avoiding environmentally sustainable treatment or disposal costs.
- Applicability of the MRET Scheme should be limited to new Greenfield projects.
- Value should be placed on other externalities of projects by Governments (where applicable) e.g. resolution of pests (European House Borer problem in Western Australia), or ameliorate the impact of salinity or avoidance of methane emissions.
- Incentives to assist in the application and development of new technologies such as logistic processes or gasification.
- Set renewable energy targets for particular technologies.
- Provide concessional finance or grants.
- Support the introduction of either a carbon tax or carbon trading scheme.

Government's ability to establish the correct regulatory and pricing policy settings will be a key to whether the renewable energy industry will flourish over the short and long term including 'base load' solutions like biomass fuelled generation.

Conclusion

Biomass should be considered along with all other renewable energy generation alternatives by the Committee in the ToR. Pacific Energy would be please to appear before the Committee or provide further information.

Yours sincerely

Pacific Energy Limited

Adam Boyd

CEO and Managing Director