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24 July 2009

The Secretary
Senate Economics Legislation Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

Via email to: economics.sen@aph.gov.au

Dear Sir,

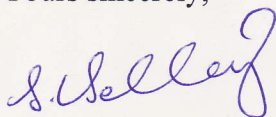
Inquiry into the Renewable Energy (Electricity) Amendment Bill 2009 and the Renewable Energy (Electricity) (Charge) Amendment Bill 2009


LMS Generation appreciates the opportunity to provide a submission to the inquiry into the Renewable Energy Amendment Bills and commend the Senate on its thorough approach to reviewing the associated provisions.

This submission contains LMS's view of the proposed Bills with particular emphasis as it applies to the Landfill Gas Industry.

I am available to provide any additional information or discuss these issues in further detail on request. LMS again appreciates the opportunity to provide our thoughts on this important issue facing all Australians.

Yours sincerely,



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*Submission: Inquiry into the
Renewable Energy (Electricity)
Amendment Bill 2009 and a
related bill.*

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Executive Summary

Whilst LMS Generation (LMS) overwhelmingly endorses the expansion of the RET scheme and the majority of the legislation as it is drafted, we ask the Senate Committee to address what appear to be minor changes to the legislation that will have a major impact on our industry.

LMS feel that the RET should be a Renewable **Electricity** Target as is the case in other countries such as the United Kingdom and the United States. The inclusion of Solar Hot Water (SHW), Heat Pumps (HP) and REC multipliers for Solar PV (SPV) detracts from the stated aim of the policy to generate 20% renewable electricity by 2020.

Certificates created by these non-generation and “phantom” sources have the potential to devastate the REC market and we are already starting to see REC prices plummet. The renewable electricity generation sector has seen a similar situation in the past due to the inclusion of light bulb replacements in the NSW Greenhouse Gas Abatement Scheme (GGAS) which destroyed the market price for credits and stopped or delayed installation of genuine electricity generation infrastructure.

Therefore the changes that we propose for the RET legislation are:

- **Remove non electricity RECs such as Solar Hot Water and Heat Pumps**
- **Remove the REC multiplier for Solar PV**
- **Increase the Shortfall Penalty and index it to CPI**
- **Increase the Target to a true 20% in 2020 and beyond**

The renewable electricity industry and more specifically the landfill gas industry, is facing a bleak future in the short term. There are numerous wind projects that have been delayed due to the REC price collapse and the landfill gas industry will be hit with the loss of GGAS in 2011, and now low REC prices until at least 2016. We cannot survive for another 5 to 7 years with a substantially declining income.

This also has an impact on regional investment and jobs as renewable electricity projects are generally in rural or regional areas. The landfill gas industry currently employs more than 300 people directly, and hundreds more indirectly and these people deserve job security.

Introduction

LMS currently owns and operates over 16 renewable power generation facilities located throughout Australia in predominantly rural areas adjacent regional centres, thus providing distributed base load renewable electricity to regional Australia. These facilities are fuelled by waste gas collected from landfill that would otherwise be released into the atmosphere as a potent greenhouse gas.

As a renewable electricity generator our company already provides 4.3% of Australia's renewable *electricity* generated RECs from landfill gas and our industry sector as a whole provided 13.8% in 2008.

In 2008 we abated more than 1.3 million tonnes of carbon from waste management projects. The technology, pioneered by our principals in the 1980s and 1990s and taken up by other operators as well as LMS, is overwhelmingly responsible for the strong performance of the waste sector in reducing overall emissions since 1990 (the Kyoto baseline year).

Snapshot of the Landfill Gas Sector and LMS

- The landfill gas sector generated approximately 850,000 MWh of renewable electricity in 2008 which offset nearly 800,000 tonnes CO₂e from coal-fired electricity generation.
- In addition the sector abates over 4 million tonnes of CO₂e a year from the destruction of methane, therefore the total avoided emissions in 2008 was nearly 5 million tonnes and we have contributed significantly to Australia being on path to meet its 2012 Kyoto target;
- The 850,000 MWh of renewable electricity generated also saved the equivalent of 1,600,000,000 litres of water that would have been consumed in generating that electricity from coal;
- For LMS itself, the output from 37 MW of base-load renewable electricity generators, installed at 16 distributed locations across metropolitan and regional Australia, will generate in excess of 280,000 MWh in 2009/10 providing more than 30% of the industry's total carbon and water savings; and
- LMS' 'business as usual' projection forecasts the addition of a further 20 MW of capacity and grid connection of an additional 5 sites between 2010 and 2012 with continued growth beyond this period providing that policy appropriately recognises and supports this renewable energy opportunity.

Impact on LMS

In the case of landfill gas, there is an opportunity to grow the generation of base-load renewable energy from organic material deposited in landfill as a significant contributor to the 20% by 2020 Renewable Energy Target (RET) for Australia. Landfills are currently providing nearly 14% of Australia's electricity generated Renewable Energy Certificates (RECs), when non electricity sources such as SHW, HP and SPV are excluded. By focusing on this form of resource recovery, it is estimated that there is potential for a 300% to 600% improvement in the current level of electricity generation from this source.

Despite landfill gas fuelled power generation having been an early mover and great contributor to renewable electricity generation and carbon abatement in Australia, LMS faces what could be considered a "perfect storm" of conditions that could potentially undermine decades of good work.

Under the proposed Carbon Pollution Reduction Scheme (CPRS) LMS will lose the huge percentage of its project income that is generated from:

- Federal Government's Greenhouse Friendly scheme (GHF); and
- NSW Greenhouse Gas Abatement Scheme (GGAS)

The Department of Climate Change has argued that partial compensation for these losses would be recovered in the form of rising RET REC value. However, the short term projections for REC value is declining and companies such as LMS cannot tread water in the hope that they may rise sometime in the future.

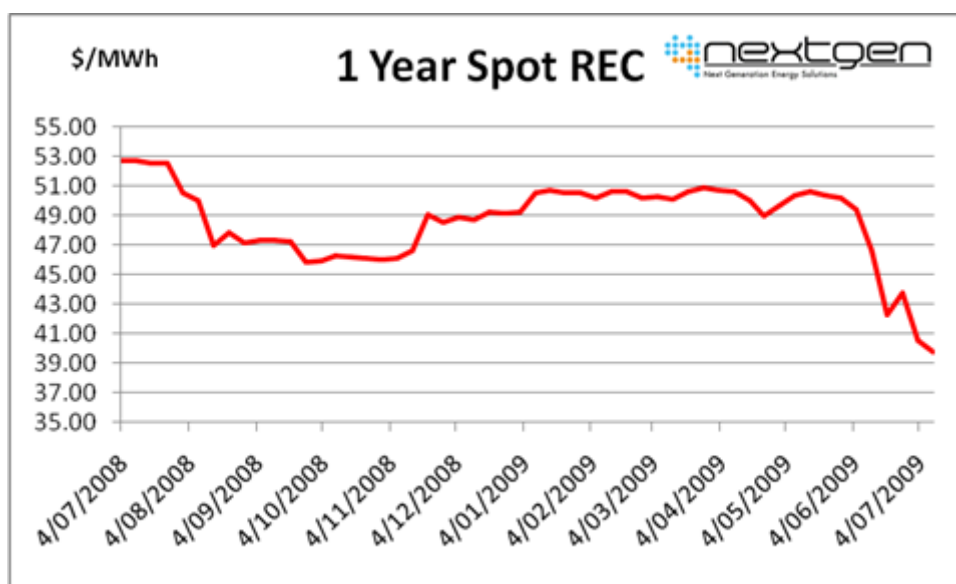
These price reductions appear to be a direct result of RECs created from SHW, HP and SPV swamping the market. The sheer quantity being produced means that the supply and demand ratio is significantly altered and thus prices fall. This type of non generation and "phantom" REC is also generally seen as a windfall by its creators or aggregators and tends to be sold off on the spot market at a significantly discounted price to ensure monthly cash flow for these entities.

LMS is currently in the position where we have upcoming projects from which we are unable to sell the NGACs and now cannot sell the RECs either. These projects will have to be delayed or abandoned altogether if the legislation is not amended and existing projects may need to be shut down when their current contracts expire. This will deter any investment in the short term and create uncertainty for longer term investment in this sector and ultimately result in higher greenhouse gas emissions.

Evidence

According to Green Energy Trading Pty Ltd, June 2009 REC Review, around 6.6 million SWH RECs are expected to be created in 2009, which equates to 44% of total REC creation with wind at 29%.

Spot REC prices dropped significantly over the month of June as shown in the graph below, and have since dropped below \$38, significantly lower than the \$52 seen earlier in the year.



The RECs surplus is expected to grow to 16.6 million RECs at the end of 2010, further contributing to a market oversupply and further price falls.

With no new renewable project commitments, the surplus or banked RECs is expected to remain until 2015/16. The irony of this is that the June 2009 REC Review also found that the earlier project commitments are made, the lower the total investment that will be required.

The current REC surplus has a threefold impact, it will significantly impact on the viability of early movers like LMS, it will inhibit short term investment in renewable electricity projects and it will ultimately significantly ramp up the total investment required to meet long term targets.

The Issues

The stated purpose of the expanded RET scheme is to deliver at least 20% of Australia's electricity from renewable sources by 2020. Therefore the primary focus of the Renewable Energy Target must be to encourage the generation of renewable *electricity*. The scheme in its current form will fail to deliver this minimum target for a number of reasons.

Electricity or Energy

The RET schemes goals are explicit in its intent to deliver on the Government's commitment of at least 20 per cent of Australia's *electricity* supply to be generated from renewable sources¹. The inclusion of alternative energy sources such as SHW, HP and SPV multipliers compromises this goal.

Further, as noted earlier, the allowance of these energy sources under the legislation is flooding the REC market, diminishing their value, and further deterring short term renewable electricity investment.

The environmental benefit of these alternative energy sources is real and significant and we therefore understand why the Government has been keen to promote their use and reward people that do. However this should not come at the cost of the longer term goal of installing renewable electricity infrastructure.

LMS therefore feel that these sources should be treated as energy reduction or energy efficiency and included in one of the existing efficiency schemes or have a separate scheme established that doesn't impact on investment in electricity generation infrastructure.

Alternatively the 20% target should be increased to accommodate these additional sources.

Infrastructure investment

Meeting and sustaining long term objectives for renewable electricity targets ultimately rely on commercial investment in infrastructure and technology in the near future. The current RET legislation encourages individual take up of SHW, HP and SPV, and has a potential significant down side to renewable electricity security and sustainability.

In the scheme these two programs (SHW and small SPV) offer the ability to fore sell their estimated life time REC value. Apart from the immediate impact this flooding has on the REC market value, as described earlier, it does not offer assurance in the long term that electricity will be produced, because the reliance on SHW, HP and SPV over the next 5 years will produce a looming renewable electricity shortfall, timed to coincide with the phasing out of the RET scheme.

They not only deter investment in infrastructure now, the SWH and SPV systems installed in 2010 will be reaching the end of their service life by 2020 and 2030 respectively. Meaning future Governments will need to fork out again to replace units or face a potential surge in electricity demand at that point, with insufficient infrastructure to provide it.

¹ [Commentary to the Renewable Energy \(Electricity\) Amendment Regulations 2009](#)

Shortfall Penalty Increase

The shortfall charge should be set at a very high level to ensure compliance and to ensure that the 20% target is met. A low penalty will entice firms to simply pay the penalty rather than invest in new generation opportunities, especially in the later years of the scheme.

The charge should be significantly higher than the projected peak REC price to act as a real deterrent and ensure generation levels are met. This also ensures that REC prices are driven by the market, rather than the penalty.

In similar overseas schemes such as the UK Renewable Obligation scheme, the penalty also rises each year with the retail price index and companies that fail to meet their obligations are required to pay the penalty price for each unit of energy they are in deficit as well as surrender certificates to cover the shortfall in following years. In this way the non-complying entity is truly penalised for non-compliance.

An un-indexed penalty as suggested in the draft legislation, based on a projected peak REC price effectively puts a cap on the market price in uncertain economic times. It introduces uncertainty caused by incorrect modeling and ignores inflationary pressures and therefore, as a minimum, the penalty should be indexed to CPI to reflect the ongoing price increase associated with participation in the scheme.

20% Target

The 2007 report by Australian Bureau of Agricultural and Resource Economics (ABARE) to the Australian Government Department of Resources, Energy and Tourism, Canberra², projected electricity generation to reach 349,400 GWh in the year 2019-2020.

Based on the current RET 2020 target of 45,000 GWh, plus the baseline renewable generation capacity of 15,000 GWh, the total electricity from renewable sources will only be 17.2% of the total. Based on the ABARE projections the RET 2020 target should be a conservative 55,000 GWh to meet the minimum 20% target.

By 2030, ABARE predicts the total electricity generated to be 415,400 GWh, with the current RET capping at 45,000 GWh (60,000 GWh including baseline) renewable sources will only be 14.4%. As a minimum the RET 2030 target should be lifted to 68,000 GWh in order to maintain the 20% renewable target.

We should be progressively increasing the RET to figures like 30% by 2030 and 40% by 2040 rather than progressively decreasing it to figures lower than 20%.

While the recently proposed Waxman-Markey climate change bill in the USA has a lower 2020 stated target of 17.5% it continues to increase to 25% by 2025 then sustained at 25% out to 2039. The scheme is also based on a real percentage rather than the Australian scheme that is capped at 45,000 GWh which projects only 14.4% of our 2030 electricity consumption. The current RET legislation promotes a stagnation in renewable investment beyond 2020 rather than ongoing investment to match increasing consumption that percentage based targets set.

² [Australian Energy: National and State Projections to 2029-30](#)