

The Senate

Environment, Communications,
Information Technology and the Arts
Legislation Committee

Provisions of the Renewable Energy
(Electricity) Amendment Bill 2002

December 2002

© Commonwealth of Australia 2002

ISBN 0 642 71209 3

This document was printed by the Senate Printing Unit, Parliament House, Canberra.

Committee membership

Members

Senator Alan Eggleston, Chair (LP, WA)

Senator Sue Mackay, Deputy Chair (ALP, TAS)

Senator Andrew Bartlett (AD, QLD)

Senate Kate Lundy (ALP, ACT)

Senator Santo Santoro (LP, QLD)

Senator Tsebin Tchen (LP, VIC)

Substitute Members

Senator Brian Greig (AD, WA) to replace Senator Bartlett for information technology portfolio

Senator Lyn Allison (AD, VIC) to replace Senator Bartlett for the Committee's inquiry into the Renewable Energy (Electricity) Amendment Bill 2002 and the Telecommunications Competition Bill 2002

Senator Kerry O'Brien (ALP, TAS) to replace Senator Lundy for the Committee's inquiry into the Renewable Energy (Electricity) Amendment Bill 2002

Senator Guy Barnett (LP, TAS) to replace Senator Tierney for the Committee's inquiry into the Renewable Energy (Electricity) Amendment Bill 2002

Senator Aden Ridgeway (AD, NSW) to replace Senator Bartlett for matters relating to the Arts portfolio

Participating Members

Senator the Hon Eric Abetz (LP, TAS)

Senator the Hon Nick Bolkus (ALP, SA)

Senator the Hon Ron Boswell (NPA, QLD)

Senator Bob Brown (AG, TAS)

Senator George Campbell (ALP, NSW)

Senator Kim Carr (ALP, VIC)

Senator Grant Chapman (LP, SA)

Senator Stephen Conroy (ALP, VIC)

Senator the Hon Helen Coonan (LP, NSW)

Senator Christopher Evans (ALP, WA)

Senator the Hon John Faulkner (ALP, NSW)

Senator Alan Ferguson (LP, SA)

Senator Jeannie Ferris (LP, SA)

Senator Brian Harradine (IND, TAS)

Senator Leonard Harris (PHON, QLD)

Senator Susan Knowles (LP, WA)

Senator Meg Lees (AD, SA)

Senator Ross Lightfoot (LP, WA)

Senator Jan McLucas (ALP, QLD)

Senator Brett Mason (LP, QLD)

Senator Julian McGauran (NPA, VIC)

Senator Shayne Murphy (IND, TAS)

Senator Kerry Nettle (AG, NSW)

Senator Robert Ray (ALP, VIC)

Senator John Watson (LP, TAS)

Senator Penny Wong (ALP, SA)

Senator John Cherry (AD, QLD) for matters relating to the Communications portfolio

Committee Secretariat

Mr Michael McLean, Secretary

Mr Jonathan Curtis, Inquiry Secretary

Committee Address:

Environment, Communications, Information Technology and the Arts Legislation
Committee
S1. 57, Parliament House
Canberra ACT 2600

Tel: 02 6277 3526

Fax: 02 6277 5818

Email: ecita.sen@aph.gov.au

Internet: http://www.aph.gov.au/senate/committee/ecita_ctte/index.htm

TABLE OF CONTENTS

COMMITTEE MEMBERSHIP	iii
CHAPTER 1	1
THE BILL	1
Introduction	1
Background – the Mandatory Renewable Energy Target	1
The provisions of the Bill	4
CHAPTER 2	7
KEY ISSUES.....	7
Introduction	7
Section 17 – definition of an eligible renewable energy resource	7
Gaming provisions.....	17
Baseline calculation.....	18
Other issues.....	28
General recommendations	33
AUSTRALIAN DEMOCRATS SUPPLEMENTARY REPORT	35
RENEWABLE ENERGY (ELECTRICITY) AMENDMENT BILL 2002	35
APPENDIX 1	39
LIST OF SUBMITTORS.....	39
APPENDIX 2	41
LIST OF WITNESSES	41
APPENDIX 3	43
AGO UNDERSTANDING, AS OF 11 NOV 2002, OF CONTRACTUAL ARRANGEMENTS LINKING ENERTRADE, GPS AND BSL.....	43
MANDATORY RENEWABLE ENERGY TARGET - LIABILITY.....	44

Chapter 1

The Bill

Additional renewable energy capacity is critical if Australia is to benefit from the opportunities presented by a large and rapidly expanding global industry. It is also important for creating regional jobs, revitalising local economies and providing clean, non-polluting power to help in tackling climate change.¹

Introduction

1.1 On 26 September 2002, the Senate referred the provisions of the Renewable Energy (Electricity) Amendment Bill 2002 to the Senate Environment, Communications, Information Technology and the Arts Legislation Committee for inquiry and report on 19 November 2002. The Committee advertised the inquiry in the Australian Newspaper on Wednesday 2 October, 2002, as well as writing to a number of interested organisations and individuals.

1.2 The Committee received in response a total of 44 submissions, which are listed at Appendix 1. A public hearing was held in Canberra on Friday 15 November, 2002 (a list of Witnesses is at Appendix 2).

Background – the Mandatory Renewable Energy Target

1.3 The bill amends the *Renewable Energy (Electricity) Act 2000* and the *Renewable Energy (Electricity) (Charge) Act 2000*, which established the Mandatory Renewable Energy Target (MRET) scheme.

1.4 The original bills establishing the MRET were the subject of a Senate Environment, Communications, Information Technology and the Arts Legislation Committee inquiry, which reported in August 2000. The scheme also took place in the wider context of a References Committee inquiry into the progress and adequacy of Australia's policies to reduce global warming, resulting in the report titled *The Heat is On: Australia's Greenhouse Future*, tabled in November 2000.

Overview²

1.5 The Government's renewable energy target places a legal liability on wholesale purchasers of electricity to proportionately contribute towards the generation of an additional 9,500 GWh of renewable energy per year by 2010.

1 Greenpeace, *Submission 15*, p 1

2 This summary is an edited extract taken from: Office of the Renewable Energy Regulator website, Overview of the Mandatory Renewable Energy Target, at www.orer.gov.au

1.6 The measure applies nationally, with all electricity retailers and wholesale electricity buyers on liable grids in all States and Territories contributing proportionately to the achievement of the measure.

Coverage

1.7 The measure applies to grid-based power applications. For administrative efficiency, a specified size cutoff has been nominated for coverage, with electricity sales on all grids of over 100 MW installed capacity attracting liability. Grids are defined as any network of transmission and/or distribution lines which connect a generator to an end-user. Any new grids of over 100 MW capacity, or grids growing beyond the threshold level, are covered once this threshold is reached.

1.8 The measure applies to all wholesale electricity purchasers on liable grids. Self-generators, including off-shore operations on the North West Shelf, are excluded as liable parties under the measure, except to the extent that they make wholesale purchases.

Allocation of Liability

1.9 Parties are proportionately liable for meeting their share of the measure. For example, if a liable party purchases 10% of the liable electricity in the country, they must meet 10% of the interim target level for that year. The renewable power percentage, specified in regulations each year, is the process for determining the actual number of renewable energy certificates which must be surrendered each year to discharge a liability.

Meeting the liability

1.10 Liable parties are required to make their own arrangements to meet their obligation under the target. Liable parties annually surrender renewable energy certificates to the Regulator equal to their requirement, with renewable energy certificates expiring as a result of this process. Liable parties can either develop their own contracts with renewable energy generators to acquire renewable energy certificates or trade in renewable energy certificates at a price negotiated by individual parties.

Meeting the target – phasing

1.11 MRET is phased in through a number of interim targets, over the period 2001 – 2010, with the full target of 9,500 GWh in place for the period 2010 – 2020. Interim targets were set to ensure consistent progress towards achieving the 9,500GWh target by 2010 and that all of the investment does not occur in the final years of the scheme.

Renewable Energy Certificates (RECs)

1.12 Renewable energy certificates are created on the basis of accredited renewable energy generation arising from the operation of eligible renewable energy generation assets that deliver renewable electricity to a grid, end point user or directly to a retailer

or wholesale buyer. Some installations of solar water heaters may also be eligible for renewable energy certificates.

1.13 Each renewable certificate is equal to (or in the case of solar water heaters, equivalent to) 1 MWh of renewable generation.

Eligible renewable energy sources

1.14 A range of energy sources are eligible, including hydro, wind, solar and various bio-products.³

1.15 Fossil fuels and fossil fuel derived waste products are not eligible under this measure.

Eligible Renewable Energy Generators

1.16 Eligible renewable energy generation assets commencing commercial operation on or after 1 January 1997 can earn certificates for all electricity provided, following accreditation by the legislation. Pre-existing renewable generation assets (defined as in commercial operation prior to 1 January 1997) are only eligible to earn certificates from existing generation assets where they can demonstrate an increase in output from those assets above a relevant historical baseline.

1.17 Measurement of the existing level of renewable generation at 1 January 1997 is required, so that quantification of any increases above this level that might be eligible as 'new' generation can be established. This is done through an averaging process. Averaging over a three year period applies unless a case can be made for an alternative or more statistically representative period to be applied or the Renewable Energy Regulator considers that a more statistically representative period should apply.

Incentives for compliance

1.18 The penalty for non-compliance is set at \$40/MWh. Penalties are redeemable if the shortfall is made up within the next three years.

1.19 A leeway of up to 10% is allowed in the meeting of targets. Where a shortfall is outside the 10% leeway, the whole shortfall will incur the penalty.

Role of Regulator

1.20 The Office of the Renewable Energy Regulator (ORER) has been established to administer the regime, including enforcing the legislation through imposing penalties and conducting audits. Roles of the Regulator include:

3 see below for details.

- accrediting renewable energy generators and determining baselines for existing generators;
- ensuring that renewable energy certificates are validly issued;
- maintaining a list of liable grids;
- tracking the creation and trade of renewable energy certificates;
- assisting liable parties in determining liabilities;
- retiring RECs for compliance purposes; and
- other administrative procedures as required for the effective operation of the measure.

Review processes

1.21 Section 162 of the Act requires a review to assess the efficiency and effectiveness of the scheme, to occur two years after the introduction of the measure and be conducted by an organisation independent of the Regulator. The report of the review is to be tabled in Parliament by the Minister within 12 months.

The provisions of the Bill

1.22 According to the Second Reading Speech, the amendments in the Bill are administrative in nature and relate to:

- The clarification of definitions, including those related to eligible renewable energy sources, components of a power station, relevant acquisitions of electricity and penalty charges.
- The capacity of the Renewable Energy Regulator to vary decisions, including those related to energy acquisition statements, energy shortfall statements and the 1997 eligible renewable energy baseline for an accredited power station. This action may be at the regulator's own instigation or that of the liable party and will be exercised in a number of circumstances.
- The introduction of information-gathering powers to underpin the monitoring, auditing and compliance requirements of the *Renewable Energy (Electricity) Act 2000* and to bring this legislation into line with similar pieces of Commonwealth legislation.
- The extension of authorised officers to include officers appointed by the Commonwealth and by state and territory governments.
- The capacity of the Renewable Energy Regulator to suspend entitlements, including the accreditation of a power station, in a number of limited circumstances.
- The inclusion of administrative review provisions covering decisions by the Renewable Energy Regulator to take action to vary or suspend.

1.23 A detailed analysis of the effect of each of the provisions of the Bill is contained in the Bills Digest prepared by the Parliamentary Library.⁴

4 Department of the Parliamentary Library, Bills Digests 2002, from www.aph.gov.au

Chapter 2

Key issues

Introduction

2.1 With limited exception, the bill has the support of almost all the submissions, which reflects the largely administrative nature of most provisions. The Sustainable Energy Authority Victoria, for example:

believes that the proposed amendments will generally improve the administrative integrity and the efficiency of the Act.¹

2.2 However, submissions to the inquiry focused on four principal issues that in some respects go beyond the scope of the bill:

- the definition of an eligible renewable energy resource in Section 17 of the Act;
- concerns, largely from the sugarcane industry, over the possible scope of the new anti-gaming provisions;
- dispute over the existing baseline setting regime, and its effectiveness in furthering the purposes of the Act; and
- the small size of the current 9,500 Gwh Mandatory Renewable Energy Target.

2.3 The Committee notes that many aspects of the submissions focus on significant policy issues that are not strictly within the ambit of the bill and that are more appropriately dealt with by the forthcoming MRET review.

Section 17 – definition of an eligible renewable energy resource

2.4 The sources of renewable energy that can be used to create RECs are defined in Section 17 of the Act and the bill makes a number of changes intended to clarify these definitions. The effect of the changes is summarised by the Australian Greenhouse Office:²

Original	As Amended	Reason for Change
Hydro	Hydro	No change
Wave	Wave	No change
Tidal	Tide	No change

1 SEAV *Submission 18*, p 1

2 AGO, *Submission 39*, p 3

Ocean	Ocean	No change
Wind	Wind	No change
Solar	Solar	No change
Geothermal aquifers	Geothermal aquifers	No change
Hot dry rocks	Hot dry rocks	No change
Energy crops	Energy crops	No change
Wood waste	Wood waste	No change
Bagasse co-generation	Bagasse	Co-generation is a technology not a source
Black liquor	Black liquor	No change
Crop waste; agricultural wet waste	Agricultural waste	Clarification and removal of redundant term
Food and agricultural wet waste	Food waste and food processing waste	Clarification
Municipal solid waste combustion	Biomass-based components of municipal solid waste	Removal of technology (combustion), and clarification of intent that only biomass component eligible
Crop waste	Waste from processing agricultural products	Clarification
Landfill gas	Landfill gas	No change
Sewage gas	Sewage gas	No change
Solar hot water	Removed	Removal of irrelevant term
Fuel cells	Removed	Removal of technology
Photovoltaic and photovoltaic renewable stand-alone power supply systems	Removed	Removal of redundant term (covered by solar energy, wind and hydro) and technology
Wind and wind hybrid renewable stand-alone power supply systems	Removed	Removal of redundant term (covered by solar energy, wind and hydro) and technology
Micro-hydro renewable stand-alone power supply systems	Removed	Removal of redundant term (covered by solar energy, wind and hydro) and technology

Co-firing	Removed	Removal of technology
-----------	---------	-----------------------

2.5 These changes simplify the list and remove redundant terms and aim to provide certainty to industry, as well as focusing on the energy source rather than the technology used to generate it. Proposed subsections 3-5 also provide a power to make regulations to restrict the meanings of any of the eligible renewable energy sources and extend/clarify the meanings of the ineligible energy sources.³

2.6 Submissions have raised three matters in relation to these revised definitions.

Biomass

2.7 Bioenergy Australia is an alliance of public and private sector groups that seeks to encourage the use of biomass as a renewable energy source. They argue that the changes are inconsistent in that they have grouped several renewable energy sources into generic categories – hydro, wind and solar:

However, eleven categories of biomass are now presented in the Bill, rather than one generic ‘biomass’ category as an eligible renewable energy source. The list of eligible biomass items in the Bill may fail to capture various sustainable and desirable biomass sources by itemising specific biomass sources. In addition there is some redundancy, as bagasse, a listed biomass source, would generally be regarded as a food processing waste, or possibly waste from processing of agricultural products, and is thus duplicated in the list.

2.8 Accordingly, they recommend that Section 17(1) (i-s) be replaced by a new generic ‘17 (1) (i) biomass’. This has the further advantage of avoiding the potential problem that if a biomass source is not explicitly on the list, yet is a sustainable source which meets the intent of the legislation, it may not be eligible.

For instance, I am aware of some projects to develop high oil content algae as a source of renewable energy. However, algae are not conventional energy crops, and so may not qualify for Renewable Energy Certificates if not listed under Section 17. Likewise animal manures are not listed and may not fit into a listed classification. There is huge environmental merit in using animal manure as a feedstock for anaerobic digesters, capturing the methane gas (a potent greenhouse gas), producing renewable energy, while having multiple environmental benefits, such as odour control, management of a waste stream, reduction in the spread of pathogens, and obviating ground water pollution.⁴

3 AGO, *Submission 39*, p 3

4 Bioenergy Australia, *Submission 2*, p 1-2

2.9 Other examples include wool scourings and tallow, and while sewage gas is permitted, thermally gasifying sewage (biosolids) to produce a combustible, renewable gas would appear not to be on the list, and ineligible.⁵

Woodwaste

2.10 Arguments were also put to the Committee in relation to the acceptability of wood as a source of eligible renewable energy. The current definition includes 'wood waste' which is further defined in Regulation 8.

2.11 Representatives of the forest industry argue that this definition is unduly restrictive, and is leading to the under-utilisation of an important source of renewable energy, with only approximately 0.5m tonnes currently being used,⁶ out of a potential five million tonnes, which is currently used to run drying kilns at sawmills, burnt on site or dumped into landfill.⁷ According to the National Association of Forest Industries (NAFI), the quantity of wood waste is an inevitable part of forest operations: native forest produces about 1,000 cubic metres of biomass per hectare, from which 10 per cent is used for sawlogs and veneer logs; 35 per cent as pulpwood; and 20 per cent available for renewable energy production.

2.12 The remaining 35 per cent of the biomass is left in the forest. This provides nutrients for regenerating the forests and logs to provide habitats for insects, reptiles, birds and similar small invertebrate species.⁸ Furthermore, the forest residues are burnt anyway to create a seed bed for regenerating the forest and to reduce fuel loads and thereby minimise the damage caused by forest fires.⁹

2.13 NAFI told the Committee that much greater use could be made of this wood waste:

Current annual wood waste includes up to five million cubic metres of native forest harvesting residue, and a further five million cubic metres of milling residue. These materials could be used for biofuel production throughout Australia.

There is no need to increase the area of production forest being harvested in order to supply renewable energy producers.

5 Bioenergy Australia, *Submission 2*, p 1-2

6 Mr Townsend, *Proof Committee Hansard*, 2002, p. 45

7 Mr Townsend, *Proof Committee Hansard*, 2002, p. 47

8 Ms Carnell, *Proof Committee Hansard*, 2002, p. 43

9 Huon Resource Group, *Submission 6*, p 2; see also Forestry Tasmania, *Submission 36*, p 2; Ms Carnell, *Proof Committee Hansard*, 2002, p. 43

Existing residual material could generate enough electricity to meet approximately 30% of the additional power supply targeted from renewable energy sources.¹⁰

2.14 This view is supported by officers of CSIRO. Mr Stein told the Committee that:

I believe it makes little technical sense to effectively exclude tree-based crops as an eligible source, while allowing energy crops based on agricultural residues.¹¹

2.15 Dr Raison echoed this view:

I think we should allow all forest biomass to be used for bioenergy. That includes sawmill residue, forest residues and energy crops. A lot of the debate has been around whether these sources are sustainable. I think in reviewing the regulations it would be far more productive to put more emphasis on having a good sustainability test involving probably a third-party audit process rather than some of the other elements of the regulations which are very confusing and very bureaucratic and probably are quite significant inhibitors to development of forest bioenergy in Australia.¹²

2.16 Mr Stein adds that the relative advantage of wood waste use for generation has increased due to the work CSIRO have done on gasification and micro-turbines means:

that the capacity to produce quite small and efficient power generation from wood waste becomes real. The dilemma of the past of actually having to build a huge power plant to produce energy really goes. That means that potentially in quite small country towns microturbines could be used that were wood fired that could potentially replace diesel, which has to be good thing for the environment.¹³

2.17 Internationally, wood waste is widely used for generation, including eighteen countries within the OECD, the European Parliament and the USA.¹⁴

2.18 Advocates of this view stress several points. Firstly, forests would not be logged for the purpose of providing fuel for power stations, as there is no incentive for the forest and timber industry to use high-value saw logs for low value activities.¹⁵

10 NAFI, *Submission 17*, p 1

11 Wes Stein, *Submission 31*, p 2

12 Dr Raison, *Proof Committee Hansard*, 2002, p. 14-15

13 Ms Carnell, *Proof Committee Hansard*, 2002, p. 48

14 Ms Carnell, *Proof Committee Hansard*, 2002, p. 43

15 NAFI, *Submission 17*, p 3

You have to ask too why anybody would pay a royalty to a state government for a tree and then proceed to use it for a purpose that was lowest value. From a private sector perspective, if you can get a sawlog out of it you get a sawlog out of it; if you can get woodchips out of it to get woodchips out of it; and renewable energy really will be at the bottom end of the food chain on this, I have to say.¹⁶

2.19 Secondly, using these residues for power generation has the further advantage of reducing both smoke pollution from the burn-offs, and methane and other greenhouse gasses released from the rotting timber.¹⁷ Forestry Tasmania point to the findings of the CSIRO report *Review of the science relevant to the sustainable use of native and plantation forest-harvesting residues for energy production in Tasmania*, in support of their submission.¹⁸

2.20 Thirdly, even though coal is more efficient than wood in terms of CO₂ release per unit of energy produced:

when you take over what is happening in terms of the total picture, in terms of in the forest, use of sawmilling residues and the co-firing, that is where you come up with one-eighth CO₂ released from wood-fired activities relative to what is going on with coal fired.¹⁹

2.21 Conversely, both Basslink Concerned Citizens Association and Environment Victoria oppose the inclusion of native forest woodchips as renewable energy source.²⁰ According to Ms Siewert, of the Conservation Council of WA:

We do not support the use of native forest wood waste for the scheme. We believe that it would serve to generate unsustainable forest management practices and to further the exploitation of native forests.²¹

2.22 When pressed on the issue, the Conservation Council conceded that it is not simply the use of wood waste that it opposes, but the harvesting of native forests.

Senator Barnett – So you would prefer it [i.e. wood waste] to rot on the forest floor?

Ms Siewert – We would prefer not to see those forests logged in the first place.

16 Ms Carnell, *Proof Committee Hansard*, 2002, p. 49; see also p. 48

17 Forestry Tasmania, *Submission 36*, p 2 - 3

18 Forestry Tasmania, *Submission 36*, Attachment

19 Mr Townsend, *Proof Committee Hansard*, 2002, p. 48

20 Basslink Concerned Citizens Association, *Submission 7*, p 2; Environment Victoria, *Submission 10*, p 1

21 Ms Siewert, *Proof Committee Hansard*, 2002, p. 59

Senator Barnett – Of those forests that are harvested for timber, do you support the timber rotting on the forest floor rather than being used for wood waste?

Ms Siewert – I think the forest management issues are extremely complicated issues. I have stated our position, which is that we do not think it is appropriate that we use native forest harvesting and that we need to come up with a broader solution to our forest management issues. It is part of the tail wagging the dog.²²

2.23 Forestry Tasmania were at pains to emphasise the sustainable nature of the forest harvesting industry and that the use of wood waste to generate electricity would not result in more logging. Wood waste is a by-product of existing industry practices, and its use in generating electricity would maximise returns to the forest industry.

... the Regional Forest Agreements that are currently in place strictly control the harvesting of native forest. This, coupled with the legislation Tasmania has put in place, ensures that native forests are protected from excessive harvesting of timber.

I also take this opportunity to reinforce the fact that in extracting fuel wood we do not increase the area of forest harvested. Our approach has been to recover all timber that has a commercial value. This ranges from sawlogs at the higher value end to pulpwood for wood chip production from lower quality wood. All of these uses generate a many-times-better return than fuel wood.²³

2.24 This view is supported by the Tasmanian Government, who state that:

[T]he MRET legislation in this area reflects a considered policy position built of sound principles of environmental sustainability. The Senate inquiry should also note that a number of significant generation developments are progressing on the basis of existing provisions contained within the legislation ...²⁴

Problems with the ‘high value’ test

2.25 The industry claims that the key impediment preventing the effective use of woodwaste is the ‘high value’ test in Regulation 8:

The forest and timber industry can meet all other requirements of Regulation 8 of the Act, in particular the need for the material to be sourced from forests that are managed in accordance with the principles of ecological sustainability.²⁵

22 *Proof Committee Hansard*, 2002, p. 59

23 Forestry Tasmania, *Submission 36A*, p 1

24 Tasmanian Government, *Submission 33*, p 2

25 NAFI, *Submission 17*, p 1

2.26 NAFI therefore argues in favour of amending Regulation 8 to remove the ‘high-value’ test, or amend subregulation 3(e)(ii) to:

recognise that the salvage of low-grade native forest resources for renewable energy production can be the by-product of an operation undertaken in accordance with the principles of ecologically sustainable forest management.²⁶

2.27 Representatives of NAFI elaborated on this during public hearings:

The way the regulation has been written reflects the opposite of what is going on in native forests. The general nature of native forests is that they are not intensively managed and therefore produce a range of products, a small proportion of which ends up being saw and veneer logs. ... the value that is placed on them for the high-value test is when they are delivered to a mill, not when they come out the forest or leave a farm. That means you might end up taking a sawlog or a veneer log 50 kilometres down the road, but to get to your chip facility you might have to transport them 200 or 300 kilometres. That transport cost is added in to the high-value test. That makes it almost impossible, even though your logs might be worth five, eight or 10 times more going to saw and veneer facilities, to have them come out so that the high-value test says yes, you can generate renewable power from the resources you extract from native forests.²⁷

2.28 Or, as Ms Carnell added:

if the value of, say, the 10 per cent of the timber which goes to high-value logs is not higher than the value of the other 90 per cent, then you cannot get renewable energy certificates for native forest residues.²⁸

2.29 Forestry Tasmania also advocates the removal of proposed subsections 17(3) and (4)²⁹ (the power to make regulations to restrict the meanings of any of the eligible renewable energy sources and extend/clarify the meanings of the ineligible energy sources), and argues that Parliament should itself consider the extension or retraction of sources, rather than delegate the power to regulations.³⁰

Widening the definition

2.30 Greenfield Resource Options goes further in suggesting that the definition of renewable energy source should be widened to include ‘woody perennials (ie trees):

26 NAFI, *Submission 17*, p 3

27 Mr Townsend, *Proof Committee Hansard*, 2002, p. 45 – 46; note also the comments of Dr Raison, *Proof Committee Hansard*, 2002, p. 14-15

28 Ms Carnell, *Proof Committee Hansard*, 2002, p. 46

29 Item 33

30 Forestry Tasmania, *Submission 36*, p 3. Note also the support of the Tasmanian Government, *Submission 33*, p 2.

it is no different to other biomass such as bagasse, is used internationally, and can meet the excess capacity of sugar mill generators, that is currently supplied by coal.³¹

We believe that it is a failure of both logical process and of scientific thinking to discriminate between energy crops on their physiognomy when they have similar Net Primary Production capacities. Currently one crop is accepted as an energy crop for the purpose of renewable energy (sugar cane), but the other is not (short rotation tree crops).³²

Waste products indirectly derived from fossil fuel

2.31 Energy Developments Ltd are concerned that the changes to section 17 are too broad and further confuse the issue of eligible renewable energy sources. According to EDL, the changes gives the Regulator too wider determination powers, and by precluding ‘materials or waste products derived from fossil fuels’, limits the potential to use Municipal Solid Waste (MSW) as an energy source.

2.32 EDL argues that unlike coal seam methane gas or waste gases from an oil refinery, which are wastes directly derived from fossil fuels, MSW contains waste products that are indirectly derived from fossil fuels, such as paper wood products, plastics and some textiles. The Regulator has previously found these to be ineligible and required a costly pre-sorting of MSW or:

regular, detailed and hazardous assessments of the incoming MSW stream to determine the percentage component (by weight and calorific value) and conversion efficiency of the waste product elements indirectly derived from fossil fuels.³³

2.33 They argue that this is unnecessary and results in substantial compliance costs that hampers the development of the industry in a way that is contrary to the intent of the legislation. Accordingly, EDL recommends the modification of new section 17(2) to include the phrase ‘materials or waste products **directly** derived from fossil fuel.’³⁴

2.34 In this context, CSIRO pointed to emerging technologies such as solar energy-to-gas conversion. This process is most likely to fall within the definition of ‘co-firing’ which is not currently eligible as an eligible renewable energy source under the MRET scheme.³⁵ Consequently, Mr Stein argues that:

31 Greenfield Resource Options, *Submission 14*, p 1

32 Greenfield Resource Options, *Submission 14*, p 1

33 EDL, *Submission 16*, p 5

34 EDL, *Submission 16*, p 5

35 Mr Stein, *Proof Committee Hansard*, 2002, p. 14 & 17

it would be worth while giving the regulator a little more power and flexibility to be able to decide on a case-by-case basis whether a particular submission for eligibility and accreditation is allowable or not.³⁶

Conclusions and recommendations

2.35 The Committee supports the changes to the definitions contained in S.17, and in particular, both the focus on sources rather than technologies and the flexibility granted to the Renewable Energy Regulator under proposed subsections 3-5.

2.36 The MRET scheme is intended to encompass and encourage the development of a diverse range of renewable energy sources, and the amendments recommended would assist some of these to reach their full potential. The changes recommended are also consistent with the administrative nature of the bill, and their application would be safeguarded by the new discretionary powers of the Regulator. In particular, the adoption of a single ‘biomass’ category is consistent with other changes to S.17, while the use of wood waste is already accepted within the operation of the current Act.

2.37 However, the adoption of a definition to include all biomass from ‘woody perennials’ (ie trees) as suggested by Greenfield Resource Options amounts to a more substantial policy change to the regime and should therefore be considered in the 2002 Review.

Gaming provisions

2.38 Of concern to generators using sugar cane bagasse is the potential for the new anti-gaming provisions in the bill to unintentionally encompass legitimate operating activities. Item 58 of the Bill inserts a new Section 30D, **Suspending the accreditation of a power station – interconnected power stations**. The Australian Greenhouse Office explained that the item is intended to address the problem of ‘gaming’:

[A]n accredited power station is rewarded for all renewable electricity generated in a year that is in excess of its 1997 eligible renewable power baseline. However, if a power station does not reach its baseline, there is no penalty.

This situation creates the potential for a group of power stations that share a common renewable energy resource to act in concert to manipulate their individual power outputs and thereby increase the group’s renewable energy certificate entitlement in any particular year without generating additional renewable electricity.³⁷

2.39 Ms Cullen of the AGO elaborated:

36 Mr Stein, *Proof Committee Hansard*, 2002, p. 16

37 AGO, *Submission 39*, p 6

If, at a particular point in the reporting year, one generator is above baseline and one generator is below baseline and you have got the capacity to actually generate a certain amount but that certain amount is not able to get the second generator above baseline and you redirect that common supply of energy to the first generator in order to get increased RECs, then that is called gaming.³⁸

2.40 Mackay Sugar argues that:

The vagueness of the currently proposed wording devolves the responsibility to define and apply “gaming” to the Regulator.

... the sugar industry could be disadvantaged by the legislation for simply maintaining current operating practices.

2.41 In the Appendix to their submission, Mackay Sugar Cooperative give a number of scenarios, encompassing both normal and potential, necessitating the redistribution of supply to various mills.³⁹ Stanwell Corporation made a similar point:

There is a very short seasonal period in each year that is the optimal time to harvest sugar cane (i.e. to maximise sugar content). Sugar millers have an obligation to sugar producers during these times to process their cane in the most efficient way. This has historically necessitated from time to time, the transfer of cane between mills in a group.⁴⁰

Conclusions and recommendations

2.42 Although accepting that the standard operations of sugar mill generators could fall within the definition of ‘gaming’, the Committee considers that the amendments are appropriate. For the scheme to have continued credibility, the Regulator must have a broad discretionary power to determine what constitutes gaming in any given instance, especially in the context of the diverse industry involved in the MRET scheme.

2.43 The proper operation of the anti-gaming provisions must also be taken in the context of the enhanced information gathering powers for the Regulator contained in proposed Part 11A, together with the broad rights of objection, review and appeal under Part 6 of the Act.

2.44 There is no reason to consider that the legitimate operations of sugar mills would be classified as gaming by the Regulator, but it must also be recognised that gaming could occur in the sugar industry, by reason of their use of a readily

38 Ms Cullen, *Proof Committee Hansard*, 2002, p. 65

39 Mackay Sugar Co-operative, *Submission 1*, Appendix A

40 Stanwell, *Submission 20*, p 1; see also CSR Sugar, *Submission 5*, and Bundaberg Sugar, *Submission 41*.

transportable fuel source and multiple linked power stations. The Committee is not convinced of the necessity to limit or further define the powers envisaged by the bill.

Baseline calculation

2.45 The issue that attracted the greatest comment from submissions was that of the setting of baselines and the extent to which these enable hydro-electricity generators to claim RECs for existing capacity.

2.46 This problem was explained by the Business Council for Sustainable Energy, whose report (under the former name of the Australian Ecogeneration Association) *Determining Baselines for Pre-existing Generators*, found:

The major problem with the Mandated Renewable Energy Target (MRET) relates to the way baselines have been determined for existing large-scale hydro projects. This is seriously undermining the effectiveness of MRET to deliver new investment in renewable energy projects, as was one of its main intentions.

This problem was revealed by the BCSE (formerly the Australian EcoGeneration Association) when it undertook a comprehensive analysis of the measure and the new renewable energy projects it was likely to create.

The conservative assessment ... shows ordinary electricity customers will pay more than \$1 billion and receive no greenhouse abatement or additional renewable energy. The BCSE has gone through this report in detail with Environment Minister the Hon Dr David Kemp and indicated to him that because of the conservative approach taken this figure could be closer to \$1.5 billion.

If all the RECs that could be produced by existing old large-scale hydro projects were produced then no new renewable projects are needed until at least 2008. This assessment is not disputed.⁴¹

2.47 This view is supported by Sustainable Energy Authority Victoria:

However we have important evidence that investment in renewable energy developments is now stalling which highlights both a need and an opportunity to improve the effectiveness of the Act.

As the Committee would be aware, there are many factors that contribute to decisions to invest in a renewable energy project. However, a significant factor is the increasing reluctance of electricity retailers to offer contracts of sufficient duration to enable developers to secure the level of finance required for projects to proceed. Importantly this disadvantages smaller private sector developers in particular.

41 BCSE, *Submission 21*, p 1-2

After a thorough and independent analysis of this situation, the Sustainable Energy Authority is satisfied that a key factor contributing to this unfavourable investment climate is the ability of existing hydro generators to create RECs without any long run increase in the level of electricity generation. This situation is compounded by a serious inadequacy in the level of disclosure about the renewable energy certificates (RECs) created by existing hydro generators.⁴²

2.48 Pacific Hydro, as a renewable energy generating company, comments that:

Our experience of the intent and implementation of the Act has shown a marked contrast between what was intended and what has been delivered.⁴³

The capability of two or three large-scale hydro players to dominate the market in the aforementioned manner, also means that the basic tenets of creating a competitive market for RECs have been substantially undermined because of the market power they possess. To illustrate this point further, one of the large-scale hydro companies has the capability of absorbing 75% of the first three years of available RECs under the Legislation. This constitutes monopoly power and is an area that needs immediate rectification ...⁴⁴

2.49 In this context, the Committee notes the evidence of Hydro Tasmania that while the company created around 118,000 RECs in 2001, their actual electricity production would have enabled them to create more than three times that number of RECs.⁴⁵

2.50 The Sustainable Energy Authority Victoria explain that partly, the problem derives from the tension between encouraging new renewable energy projects and supporting existing renewable generators:

While these objectives are not mutually exclusive, there is a tension between the benefits of encouraging investment in new generation capacity across a range of technologies and the benefits of maximising generation from existing renewable energy generators. The balance between these objectives is not explicitly defined.⁴⁶

2.51 These groups argue that the problems in the operation of the baselines system are based on several factors. One of these is seasonal variation, often referred to as ‘unders and overs’:

42 SEAV, *Submission 18*, p 1

43 Pacific Hydro, *Submission 13*, p 1

44 Pacific Hydro, *Submission 13*, p 2

45 Mr de Geest, *Proof Committee Hansard*, 2002, p. 7

46 SEAV, *Submission 18*, p 7

Seasonal variation in rainfall can provide short term increases in output for all hydro generators which have the excess capacity to take advantage of the extra resource available. In years where additional rainfall enables generators to produce electricity above their baseline, RECs can be produced. In some years however low rainfall will reduce output and generation will be below the baseline, preventing creation of any RECs. However, since the baseline is a long run average, generation in above average years produces RECs without any increase in the average amount of renewable energy generated in Australia.

The nature of the hydro resource means that the electricity generated from hydro generators can vary considerably. The structure of MRET means that a generator is able to create RECs when its output is above the baseline in any given year ... however there is no commensurate requirement for a generator to repay RECs in years where the generator is producing below the baseline.

It is estimated that RECs created from seasonal variations will account for approximately 0.8 million RECs per annum. These RECs do not represent any long term increase in the amount of renewable energy generated in Australia. As a result these RECs would not contribute at all to the MRET objectives of increased renewable energy generation and reduced greenhouse gas emissions.⁴⁷

Adequacy of existing baselines regime

2.52 Other submissions argued strongly that the existing regime is working effectively and as intended, and is already successfully driving higher levels of investment in a range of renewable energy projects. According to Hydro Tasmania:

The Mandatory Renewable Energy Target (MRET) provides Hydro Tasmania with the incentive to upgrade and refurbish our existing aging hydro assets (on average 45 years old) in order to produce additional renewable energy above 1997 generation levels.

... Hydro Tasmania has commenced the first phase of a comprehensive upgrade and refurbishment program as a result of the MRET. This first phase involves a 10 year program of upgrades and refurbishments to 11 of our power stations, and has resulted in three partnership agreements being developed with hydro turbine manufacturers. The investment involved in this first phase has been estimated at up to \$208 million.⁴⁸

2.53 In relation to the baselines:

Baselines were a carefully considered aspect of the MRET scheme and were introduced as part of a least-cost approach to ensuring the development of 9,500 GWh of new renewable energy each year by 2010. Following a

47 SEAV, *Submission 18*, p 5

48 Hydro Tasmania, *Submission 23*, p 1 & see Appendix 2 for a detailed discussion.

comprehensive consultation process between Government and industry, it was recognised that to achieve the target in the most cost effective and efficient manner, it is important to improve the performance of existing renewable energy generators, and prolong the lifetime of aging assets.

... Capital invested in maximising output from existing infrastructure when increased capacity is possible can produce additional renewable energy more cheaply than capital invested in new more expensive renewable technology.⁴⁹

2.54 As such, the system is working as intended:

Both Minister Kemp and the Renewable Energy Regulator have separately acknowledged that the MRET measure and associated REC market are working as intended. In the first 19 months of the market, a diversity of eligible renewable energy sources was used to meet the 2001 target. As well, there is considerable investment occurring in renewable energy projects, indicating that REC prices are sufficiently high to encourage new developments, particularly wind, and experts are predicting strong future investment in renewable energy projects.⁵⁰

2.55 Southern Hydro support this view:

SHP believes that even after the limited time for which MRET has operated there is strong evidence of the success of the measure.

- There has been significant investment announced in new renewable projects, particularly in wind farms, which is leading to the establishment of local renewable energy manufacturing industries.
- Both physical and financial trading of RECs are occurring in significant volumes.
- SHP has been encouraged to review operation and maintenance practices to ensure the most efficient running of our plant and to capture of all available fuel (in our case, water).⁵¹

2.56 Hydro Tasmania and the Renewable Energy Generators Association (REGA) note the range of investment in wind farms worth an estimated \$100 million per year:⁵²

49 Hydro Tasmania, *Submission 23*, p 3; REGA, *Submission 26*, p 4-5; Tasmanian Government, *Submission 33*, p 2; and Snowy Hydro, *Submission 44*, p 1.

50 Hydro Tasmania, *Submission 23*, p 3

51 Southern Hydro, *Submission 25*, p 1

52 Hydro Tasmania, Presentation to Senate ECITA Legislation Committee, Tabled document, 15 November, p 3.

Hydro Tasmania has well advanced plans to develop large scale, environmentally sound and highly competitive wind farms in Tasmania, South Australia and Western Australia. The Woolnorth wind farm on Tasmania's northwest coast has 10.5 MW installed and when fully developed will have 130MW. Two other sites with a total installed capacity of 300 MW are well advanced in the planning processes.⁵³

2.57 These developments are driving the establishment of manufacturing facilities in Tasmania for turbine nacelles and blades, creating up to 350 jobs.⁵⁴ Mr Willis of Hydro Tasmania detailed examples of the cost incentives for investment in wind:

Because of the capability of our team and the natural resources of Tasmania, there are many projects that will come alive with this framework that would be too expensive to develop without this assistance.

[For example:] the cost structure for wind developments, when considered per megawatt hour, is in the range of \$60 to \$70—that is the full cost over the 20-year life of that program. Currently, the regulated energy price for the electron in Tasmania is in the order of \$43 per megawatt hour. There is a substantial difference. The renewable energy certificate, which under this framework is then attributable to the wind development, is currently being traded in the range of \$35 to \$40 per megawatt hour. So the combination of selling the electricity and selling the renewable energy certificate clearly puts wind development into the economic frame for us, but without the renewable energy certificate and without this framework it would not be possible to make those developments.⁵⁵

2.58 These examples are also indicative of the wider industry development role played by MRET. The Renewable Energy Generators Australia (REGA) point to

Investment by existing renewable energy generators has been critical to the development of new local renewable energy industries in Australia.

Tasmania has entered into an agreement with Vestas International Wind Technology A/S to purchase a total of 128 MW of wind turbines. This agreement has resulted in Vestas committing to the establishment of a manufacturing facility for wind turbine components, including tower manufacture and nacelle assembly, in north-western Tasmania. Once Basslink is commenced, this could expand to a manufacturing facility for blades.⁵⁶

2.59 In addition, Hydro Tasmania distinguish their \$208m investment program from expenditure on maintenance. The operating expenditure for the Hydro business

53 Hydro Tasmania, *Submission 23*, p 2 and see also Appendix 3; REGA, *Submission 26*, p 7-8

54 Hydro Tasmania, *Submission 23*, Appendix 3 para 3.2. See also Vestas, *Submission 42*, p 1-2

55 Mr Willis, *Proof Committee Hansard*, 2002, p. 3

56 REGA, *Submission 26*, p 8; see also Vestas, *Submission 42*.

is about \$40 million per annum, with capital expenditure on maintaining the assets about \$30 million per annum and then the refurbishments on top of that.⁵⁷

‘Refurbishment’ is a term that we use for when a power station is reaching the end of its design life with respect to some of the equipment. Mechanical and electrical equipment lasts a shorter period than do, say, the dams and the sewer works. You have a choice to bring that forward or leave it for later and then have a less reliable power station. The upgrades are certainly bringing in new equipment that has greater potential.⁵⁸

2.60 The Committee also heard evidence that the MRET scheme is driving a range of associated management improvements. Mr Kubler of GE, told the Committee that:

With the introduction of new technologies, by changing minor parts of the hydro power station, such as the turbine, we can increase capacity by up to 30 per cent and efficiency by up to six per cent. That means that, for a 100 megawatt installation, you can increase capacity output to 130 megawatts and efficiency by up to six per cent.⁵⁹

2.61 Similarly, Mr Jackson of Southern Hydro stated:

During snow melt periods, traditionally, we did not really care if we spilt some water because the water was of no great value to us at that stage in the energy market. Now, with MRET there to help us, we are holding our dams at levels such that we will be able to capture all of the snow melt. We run our power stations now to make sure that we do not spill water on dams further down the scheme. We minimise the number of start-ups of a hydro generator, because each time you start a generator you spill a lot of water.⁶⁰

2.62 Hydro Tasmania further argue that the market is working effectively, showing strong liquidity that is often sustained by their REC sales.⁶¹ They deny market manipulation, despite expecting to hold about 25% of the market share:

I have stood accused at a number of conferences of withholding RECs from the market to jack up the price. However, at the same conferences, we have also been accused by wind developers of flooding the market with RECs and therefore holding the price down; ... in our operations in the market—if you look at the spread of prices that are quoted on the brokers’ screens, there is usually \$1 to \$2 difference between what people say they are prepared to buy at and what they are prepared to sell at—we have rarely, if ever, sold outside of that range and have generally sold well within that

57 Mr Titchen, *Proof Committee Hansard*, 2002, p. 5

58 Mr Titchen, *Proof Committee Hansard*, 2002, p. 5

59 Mr Kubler, *Proof Committee Hansard*, 2002, p. 25

60 Mr Jackson, *Proof Committee Hansard*, 2002, p. 26 & 28

61 Mr Willis, *Proof Committee Hansard*, 2002, p. 2; see also Mr de Geest, *Proof Committee Hansard*, 2002, p. 8

range, which is an indication that we are not driving the market in either direction.⁶²

Conclusions on baseline calculations

2.63 In developing the MRET system to encourage growth in renewable energy in Australia, there was a need to balance a number of difficult variables. Renewable energy generators have varying yields, both from year to year based on natural variations, and between different methods of generation. This inevitably means that different generators will be subject to a wide variety of cost structures underlying their production. Any baseline system has to account for these variations, while at the same time remaining cost effective, and providing certainty for investors.⁶³

2.64 The Regulator adopted a number of methods to calculate baselines, including the default baseline method and the special baselines approach used for more variable resources. Hydro plant baselines generally were set using a fourteen year data period from 1987 to 2000, based on a combination of simple average and a linear interpolation curve.⁶⁴

2.65 In this context, some degree of arbitrariness is inevitable. An evaluation of the baseline system must also be done in the knowledge that the issue of ‘unders and overs’ was understood during the negotiation of the MRET scheme, and the final legislation allowed existing generators to use these gains to provide incentives to maintain investment in existing infrastructure.

2.66 While there may be problems with the outcome of the regime, the Committee must question the extent to which it should attempt to address these issues, especially in the context of the forthcoming statutory review mandated by s. 162. Several submissions argue that such reforms are consistent with the administrative amendments contained in the bill. Plasmatronics, for example, states:

We cannot wait for the scheduled policy review for this act to change this situation. This is not a policy change, rather a confirmation of the aims of the Act. Currently, small business and Remote Area Power (Electricity) producers/consumers do not have a way to collect the RECs they generate. The industry has talked about constructing a clearing house for these RECs, but *that will not happen* unless there is a market to sell them to.⁶⁵

2.67 Others support the view that any substantive examination of the MRET policy should be left until the Review. Hydro Energy point out that at present, there is

62 Mr de Geest, *Proof Committee Hansard*, 2002, p. 8

63 Information provided by the Office of the Renewable Energy Regulator. See also the comments of Mr Jackson, *Proof Committee Hansard*, 2002, p. 26

64 Information provided by the Office of the Renewable Energy Regulator. See also Mr Willis, *Proof Committee Hansard*, 2002, p. 3

65 Plasmatronics, *Submission 19*, p 2; see also BCSE, *Submission 21*, p 2

only one year of performance information on the scheme, based on only nine months of operation.⁶⁶ According to Country Energy:

... a comprehensive, independent review of the Act is planned for early 2003 as required by Section 162 of the Act and the findings from this review are required to be reported back to Parliament. The review will be considering all key elements of the legislation, including the overall and interim targets, the appropriateness of the penalty, the technology mix and the effectiveness of the Act to date in progressing towards its planned objectives.

It is expected that the legislated review will be extremely comprehensive, with broad consultation expected with all participants in the electricity industry, the renewable energy sector plus the broader community. Given the short time period until this major review's commencement, we consider that an inquiry conducted by the Committee within its 6 week timeframe will not allow comprehensive coverage of the issues under debate.⁶⁷

2.68 The Committee agree and note that the amendments contained in this Bill are intended to be of an administrative nature only. The Committee considers that an examination of the fundamentals of baseline setting is essentially a matter of policy that should be addressed by the statutory review. In addition, it is too early in the life of the scheme to alter the regulatory framework without risking the destabilisation of current investment.

Lack of transparency

2.69 Numerous groups also raised the issue of transparency of information on baselines. Under the existing Act, individual company baseline information is confidential and known only to parties themselves and the Regulator.⁶⁸ Environment Victoria argues that:

Baselines for existing renewable power projects that seek to create RECs should be made publicly available. Given the significant benefits that accrue to these generators, there is no case why this information should not be released.⁶⁹

66 Hydro Tasmania, *Submission 23*, Appendix 7; see also Mr Rae, *Proof Committee Hansard*, 2002, p. 28

67 Country Energy, *Submission 11*, p 1; see also Ergon Energy, *Submission 28*, p 3; Tasmanian Government, *Submission 33*, p 2; Hydro Tasmania, *Submission 23*, p 3

68 Part 12 of the Act.

69 Environment Victoria, *Submission 10*, p 2; Conservation Council of Western Australia, *Submission 12*, p 1

2.70 The Sustainable Energy Authority Victoria recommend the amendment of Part 12 to require the disclosure of baselines for individual generators:⁷⁰

consumers will ultimately bear cost of meeting the targets set under MRET, as electricity retailers pass the cost of the renewable energy purchased through to their customer base. The measure will quickly lose support and credibility if consumers perceive that the measure is providing additional financial support for renewable energy generation that would have occurred anyway. It is therefore important that the measure is transparent in the way in which financial support is provided to renewable energy generators.

... This baseline information has been withheld by ORER to date with the argument that the information is commercially sensitive and provided in confidence. We strongly believe that the claims of commercial confidentiality should be tested.⁷¹

2.71 It is also evident that much of the above discussion relating to the operation of the baseline regime is hampered by the lack of actual data, with resulting conjecture and reverse calculations.

2.72 Most parties to the inquiry agree with the proposition of greater transparency, including the key industry groupings of REGA, the BCSE and WA Sustainable Energy Association.⁷² The Committee endorses the implementation of measures to increase transparency, but notes that no amendment to the Act is necessary to achieve this since any party may voluntarily release its own information. Equally, there are sound reasons to retain some privacy protection in the Act. In the light of the general consensus revealed during this inquiry, the most simple solution is therefore that the Regulator seek the agreement of MRET participants, through the key industry bodies, to the voluntary release of information.

Flexibility in the baseline regime

2.73 Energy Developments Limited, put to the Committee that there is also the need to adopt a more flexible approach to baseline setting that would use a dynamic baseline linked to an agreed typical diminishing LFG curve, which would recognise the particular characteristics of generation from land fill gas:

For most power projects, virtually all capital expenditure is made ‘up front’, with returns on that investment measured over a substantial period of time. On the other hand, [Land Fill Gas] require a significant amount of ongoing

70 SEAV, *Submission 18*, p 1 & 4. See also Wes Stein, *Submission 31*, p 2; BCSE, *Submission 21*, p 3

71 SEAV, *Submission 18*, p 7

72 Mr Brazzale, *Proof Committee Hansard*, 2002, p. 34; Mr Willis, *Proof Committee Hansard*, 2002, p. 2, and p. 6; Mr Rae, *Proof Committee Hansard*, 2002, p. 23; Mr Rosser, *Proof Committee Hansard*, 2002, p. 56

capital expenditure in the form of construction of new gas wells to maintain adequate gas flows to continually support electricity generation.⁷³

2.74 Mr Allen explained further during public hearings:

Landfill gas sites have a particular period of time in which the gas coming off those sites will run off. It takes approximately 20 years, but it depends on the type of waste that has been dumped at the particular landfill gas site and the specific environment in which that landfill gas site has been placed. So after five or 10 years in a particular project we may see the gas reserves or the ability to extract gas from the site turning off in a large way and not being able to support the suite of generators we may have sitting there. Therefore it will be necessary for us to go back into that site and put in additional piping, well heads and extraction costs, all of which are capital costs, to keep that particular site up and running and going forward.⁷⁴

2.75 A more flexible baseline system would enable them to revisit sites that have been up and running since 1997:

Rather than looking at it and saying, 'We need to shut that site down because we can't get any value for any additional capital contribution to that site,' it will enable us to say, 'Yes, we can get generation above the baseline, potentially, and therefore generate a REC and attribute some value for that particular REC to the capital costs.'⁷⁵

2.76 The Committee has not received enough evidence on this issue to make a final judgement, but notes that the bill already provides the Regulator with power to vary baselines, in circumstances to be prescribed by Regulations,⁷⁶ and that S.30F envisages Regulations will be drafted which would enable the Regulator to adjust baselines in a way that would meet EDL's concerns. The Committee does not consider it necessary to make any further amendment to the bill.

Other issues

2.77 Submissions raised four further issues.

The MRET Target

2.78 Several submissions argued in favour of increasing the level of the current MRET level. According to Greenpeace:

MRET was supposed to deliver a 2% increase in market share for renewable energy by 2010. However, in 1999 it was converted to a fixed target of 9,500 GWh (which at the time was believed to be a 2% target by 2010).

73 EDL, *Submission 16*, p 3

74 Mr Allen, *Proof Committee Hansard*, 2002, p. 11

75 Mr Allen, *Proof Committee Hansard*, 2002, p. 13

76 Item 58: New Division 12

With new figures showing power consumption having increased considerably, if this trend continues, the 9,500 GWh target will only maintain market share for renewable energy by 2010. The result is an extremely small target (with much of the RECs coming from pre-existing hydro) compared to the targets adopted in most other OECD countries.⁷⁷

2.79 For different reasons, PV Solar argued that the MRET should be increased from 2% to 10%,⁷⁸ while Hydro Tasmania recommends both the immediate adoption of a linear phasing path for higher interim targets and the increase of the MRET to 'its economically viable limit':

It is now clear that the 9,500 GWh target is readily achievable and understates the intended 2% additional renewable energy generation above 1997 levels. The 2010 target should be increased to at least the true additional 2% level of 13,500 GWh (based on current electricity demand projections), and upon hard evidence of successful projects, the target could be lifted further (there is evidence that 17,000 GWh is demonstrably practical and with international precedent – refer Appendix 5). Further, some industry associations are calling for a 10% increase in the MRET by 2010. Hydro Tasmania supports this new target, if it is economically viable.⁷⁹

2.80 Others took the opposite view. According to Ergon Energy:

There is a considerable cost to consumers which also needs to be considered. For example, it has been estimated that by 2010, the Act will deliver 10.6% of all electricity requirements from renewable energy at a total additional [...] incremental cost to consumers of \$330m per year. increasing that percentage to 15% of the electricity supply in 2010 would increase that cost burden by a further \$390m per year.⁸⁰

2.81 The Committee is sympathetic to these views but considers that it is too early in the life of the MRET scheme to fundamentally raise the target. However, implementation of a genuine 2% target as originally intended would result in an increase in the MRET in real terms from 95,500 GWh to around 13,500 GWh, reflecting the higher than anticipated growth in Australia's demand for electricity.

77 Greenpeace, *Submission 15*, p 2

78 PV Solar Energy, *Submission 3*, p 1

79 Tasmanian Hydro, *Submission 23*, Appendix 7. See also Mr Willis, *Proof Committee Hansard*, 2002, p. 2. An increase is also supported by Mr Stein, *Proof Committee Hansard*, 2002, p. 19; Mr Rae & Mr Jackson, *Proof Committee Hansard*, 2002, p. 28-9; Snowy Hydro, *Submission 44*, p 1.

80 Ergon Energy, *Submission 28*, p 2. See also ACA, *Submission 4*, p 1; Country Energy, *Submission 11*, p 1

Technology discrimination

2.82 Two submissions (PV Solar⁸¹ and Pacific Solar⁸²) argued in favour of altering the regime to give special recognition to renewable energy generated by photovoltaic solar panels on roofs:

PV is an industry in which Australia has had an enviable track record in research, manufacture and usage. However Australia's early lead in this global industry is being lost to Australia's major trading parties (Japan, Europe and USA) who have introduced significant subsidy schemes in order to grow their PV industry and address concerns for global warming.⁸³

2.83 In support of this, they point to the distributed generation benefits of PV which include:

- no transmission or distribution losses;
- voltage support for distribution systems;
- displacing costly and inefficient peak-load generation; and
- encouraging home-owners to be more energy conscious.

2.84 Both submissions therefore argue for a technology multiplier that would see each megawatt of energy generated from rooftop PVs attract five RECs, resulting in:

an incentive for PV on buildings that is similar in level to the hugely successful Renewable Energy Feed-in-Law that exists in Germany ...⁸⁴

2.85 Mr Wes Stein from the CSIRO Division of Technology, offers a related argument, stating his concern:

that a viable industry based on Australian technology will not be realised due to the lack of incentives provided for those renewables presently more expensive than those sourced predominantly from overseas – wind and to a lesser extent bioenergy.

2.86 While stressing that this is a matter for the statutory review,⁸⁵ he suggests adoption of a 'portfolio' arrangement that could apply to technologies such as photovoltaics, medium to high temperature solar thermal, gasification of biomass wastes, small wind, and ocean-based technologies. Under this scheme:

81 PV Solar Energy, *Submission 3*, p 1

82 Pacific Solar, *Submission 22*

83 Pacific Solar, *Submission 22*, p 2

84 PV Solar Energy, *Submission 3*, p 2

85 Dr Raison, *Proof Committee Hansard*, 2002, p. 18

a certain percentage of the 9500GWh (say 10% in total) [is] set aside for specific technologies that are in their infancy and do not yet have the same level of expertise and know-how to draw upon as, say, wind can and has from overseas. This “10%” could be administered through selected project proposals which progressively “fill” the allotted GWh. If there is a dearth of adequate proposals, the GWh would return to the other 90%.⁸⁶

2.87 Mr Stein admits that there is a degree of anti-competitiveness and arbitrariness to the proposal but considers:

it will help to generate a much more diverse and more robust industry down the track, which is what I think we are concerned about, than might otherwise emerge from just the big players pushing existing technologies right now.⁸⁷ ...

One of the issues here is the potential for growth of those components of the portfolio. At the moment, the target is very low. A renewable is not going to make much impact on our greenhouse gas budget into the future if we cannot really grow them significantly, so the potential for growth is very important.⁸⁸

2.88 He adds that selection of the portfolio would require careful consideration but notes that it has been done in Spain, Denmark, Germany, and a number of US states.⁸⁹

2.89 The Committee notes these ideas and commends them to the Review team.⁹⁰

Section 30 and Enertrade

2.90 The submission from Enertrade argued specifically against Item 60 amending S.32 of the Act. Enertrade is the trading name of the Queensland Power Trading Corporation, a wholesale energy trader owned by the Queensland Government. Enertrade does not own any physical generation assets, but purchases electricity from privately owned stations through Power Purchase Agreements and trades this into the National Electricity Market.⁹¹

2.91 The restructuring of the energy industry in Queensland and the subsequent development of the National Electricity Market in the late-1990's, led to a complex business relationship between Enertrade, Gladstone Power Station (GPS) and Boyne

86 Wes Stein, *Submission 31*, p 1

87 Mr Stein, *Proof Committee Hansard*, 2002, p. 17

88 Dr Raison, *Proof Committee Hansard*, 2002, p. 18

89 Mr Stein, *Proof Committee Hansard*, 2002, p. 18 & 21

90 The Committee notes that the introduction of a portfolio approach is already a required element of the Review: S.162(1)(g).

91 Enertrade website: www.enertrade.com.au

Smelters Ltd. (BSL).⁹² The National Electricity Code requires a generator having GPS' characteristics to be dispatched centrally through the NEM, but to preserve the conditions of the earlier GPS-BSL contract, Enertrade conducts a notional series of transactions: buying power from GPS; bidding it onto the NEM; buying the power back from the NEM; and supplying it to GPS. GPS then provides it to BSL.⁹³ This arrangement served to preserve the secure long-term power supply to BSL in accordance with the original pre-NEM contract, and protect it from the uncertainties of participation in the NEM.^{94 95}

2.92 With the entry into force of the MRET scheme, it became apparent that these arrangements could result in a dual liability. Enertrade became liable under S.32 for RECs as a result of the wholesale acquisition of power from the NEM, while potentially, GPS was liable under S.33 for providing that same electricity to BSL (a notional wholesale acquisition). This liability amounts to a projected value of around \$135m over the life of the MRET scheme.⁹⁶

2.93 According to the Australian Greenhouse Office, this ambiguity was recognised during the debate on the original bill, leading to the insertion of S.32(3), which sought to clarify that Enertrade alone would be liable for this amount.⁹⁷

2.94 This provision failed to settle the issue. This Bill, through the operation of Item 60, resolves the dispute by allocating the future liability, commencing from the 2002 compliance period, solely on wholesale purchases of electricity from the National Electricity Market – which in this case is Enertrade – consistent with the general policy of the Act.⁹⁸ Thus, the bill does not change or redefine any liability.

2.95 Ms Cullen of the AGO told the Committee:

there are two ways in which you can have a double liability situation over the one transaction. One way is that there is uncertainty with both parties over the transaction and the second way is that there is certainty with one party but a question mark over the other party. The situation between Enertrade and GPS has never been of the first situation; it has always been of the second situation. Enertrade's liability has always been that they have been liable for transactions out of the NEM, as is the case with any other

92 Both of which are owned by a Comalco-led Joint Venture. Enertrade, *Submission 37*, p 1

93 Enertrade, *Submission 37*.

94 Enertrade website: Our Partners, Gladstone Power Station. See also Mr Woodrow, *Proof Committee Hansard*, 2002, p. 52. See also the diagram provided by the Australian Greenhouse Office illustrating their understanding of Enertrade's relationships with GPA and BSL, reproduced at Appendix 3.

95 Note

96 Enertrade, *Submission 37*.

97 AGO, *Submission 39*, p 5. See also Mandatory Renewable Energy Target – Liability, ORER Factsheet, www.orer.gov.au/factsheets/liability.html reproduced at Appendix 3.

98 AGO, *Submission 39*, p 5; Ms Cullen, *Proof Committee Hansard*, 2002, p. 61

electricity retailer. That has not been in question—our legal advice has never questioned Enertrade’s liability—and that position has informed our development of the amendment as it stands.⁹⁹

2.96 As a matter of law, it is clear that Enertrade is liable under the Act and will remain so under the amendments of this bill.

2.97 The Committee recommends that the matter be considered by the Minister for Environment and Heritage, in consultation with the Queensland Government and the relevant parties. Given that Item 60 of the bill recognises Enertrade’s liability as a wholesaler and eliminates the question of double liability, the Committee recommends it be passed without amendment.

Review of the MRET Scheme

2.98 The Sustainable Energy Authority of Victoria made detailed suggestions to the Committee on the scope of the statutory review mandated under S.162, arguing that it be amended to broaden the scope of the issues that are considered including:

- a) the extent to which the Act has stimulated the development of an internationally competitive renewable energy industry;
- b) the extent to which the Act has resulted in the optimal use of the renewable energy resources in Australia;
- c) the scheduled MRET end-date;
- d) continuing to increase the target beyond 2010;
- e) the inclusion of other renewable energy technologies that displace fossil fuel use;
- f) the degree to which the operation of the Act impacts on the effectiveness of other measures that support renewable energy development.¹⁰⁰

2.99 Some of these issues are already included, in whole or part, in S.162 and the Minister also has discretion to include additional matters in the Review’s terms of reference. The Committee sees merit in widening the Review to include the matters suggested by the SEAV, whether by amendment to the bill, or by Ministerial discretion. However, the Committee does not agree with SEAV’s other suggestions that the timeframe for either commencing or tabling the Review should be shortened. In the Committee’s view, it is appropriate that the Review be able to draw on at least one full year’s data of the operation of the MRET scheme, and data from the first year of operation alone is not likely to be adequate or representative enough to yield useful

99 Ms Cullen, *Proof Committee Hansard*, 2002, p. 61

100 SEAV, *Submission 18*, p 4

analysis. Similarly, conducting a broad ranging review and producing a considered report on such a complex matter within 6 months is not considered practicable.

2.100 The Committee also notes the suggestion of Mr Stein of the CSIRO, funds generated from Renewable Energy Shortfall Charge payments be reinvested back into the scheme:

perhaps it would be better for that penalty to actually flow back to the generators or in some way back to some sort of pool that maybe is not related to that particular act but does help the renewable energy industry in some other way, perhaps through a capital grant or something else. I am sure there will always be potential problems that emerge. This is one that has already. I think in some way it would be good if, rather than just going into consolidated revenue, that penalty—if it were ever to be paid—were to go back to the industry in some to be determined, effective way.¹⁰¹

2.101 The Committee considers that this idea has considerable merit and should be explored during the 2003 Review.

General recommendations

The Committee **recommends** that the bill be passed, with consideration of the recommendations of this report.

Senator Alan Eggleston

Chairman

101 Mr Stein, *Proof Committee Hansard*, 2002, p. 16

Australian Democrats Supplementary Report

Renewable Energy (Electricity) Amendment Bill 2002

This supplementary report concentrates on issues related to the projected windfall gain to hydro generators from the MRET scheme. Other issues raised in the Chairs report will also be addressed through Democrat amendments to the bills.

Windfall gain to existing hydro generators

According to evidence presented to the Committee by the Business Council for Sustainable Energy (BCSE), the credibility of MRET scheme is being undermined by the fact that existing large scale hydro generators will be able to earn a substantial number of renewable energy certificates (RECs) from existing capacity, meaning that no investment in new generation is needed to create them. This is because of the way baselines have been determined (they appear to be artificially low) and the problem of “unders and overs” which is explained in the Chair’s report. No evidence has been provided to the Committee to dispute the claims made by the BCSE.

This analysis raises a number of worrying issues. Firstly, it means that the MRET scheme will not lead to anywhere near the level of greenhouse abatement that was originally forecast. This is simply because whenever RECs are created from generation that would have occurred anyway, there is no real additional abatement.

Secondly, it means that consumers will pay more than \$1 billion, and possibly up to \$1.5 billion extra on their electricity bills for no real additional generation or abatement. The Democrats believe that at the very least, electricity consumers should be made aware of this situation.

Thirdly, it means that MRET will not deliver the level of new investment in renewable energy that was anticipated. The key problem is that the windfall gain to existing hydro generators is creating a barrier to competition for other generators. According to the BCSE, “if all the RECs that could be produced by existing old large-scale hydro projects were produced then no new renewable projects are needed until at least 2008.”¹

From our perspective, there is no sound public policy reason for advantaging existing hydro over other forms of renewable energy, and in doing so, advantaging Hydro Tasmania’s renewable energy projects over projects in

¹ Business Council for Sustainable Development (BCSE), *Submission 21*, p.1-2.

other states. Unlike its competitors, Hydro Tasmania's generation of RECs costs them nothing in investment and the RECs are generated from day one of the measure. While we accept and welcome Hydro Tasmania's decision to invest additional income earned from the sale of existing hydro RECs in new renewable projects, there is nothing in the legislation that obliges them to do so.

The Democrats are also concerned by the market power that Hydro Tasmania can exercise in relation to the price of RECs. Hydro Tasmania provided evidence to the Committee that the electricity it produced above its baseline in 2001 was more than sufficient to register enough RECs to meet the entire first year quota of 300,000 RECs.² However, it has chosen to register only 118,000 or so RECs to date. Hydro Tasmania claims that the price of its RECs is similar to the price of other RECs in the market and rejects the idea that it is controlling the price. However the key point is not whether or not Hydro Tasmania chooses to manipulate the price but the fact that it is able to do so by virtue of its domination of the market in no-cost RECs for at least the first three years of the operation of MRET.

The Democrats note that the windfall gain to existing hydro generators is at odds with the Government's assertion at the time the legislation was introduced that MRET was a market-based economic model that ensured a level playing field for renewable energy providers. To quote the Minister's 2nd reading speech:

The market-based mechanism adopted to meet the target should send strong signals to the most cost-effective renewable energy options....

This was not understood to mean that the design of the scheme would be used to create the most cost-effective option.

The fact that Hydro Tasmania is able to generate RECs for no new investment is also at odds with the Minister's statement that "*the Government has been clear that this measure is one of those beyond no-regrets policies.*" In addition, it conflicts with the AGO's statement in its submission that "*economic costs arise from this measure because additional capital is required to generate the 9,500GWhs using renewable energy as compared to using fossil fuels.*"³

The logical conclusion to be drawn from statements made by or on behalf of the Government about this windfall gain to hydro generators is that the Government, despite claiming that additional capital expenditure would be required to create RECs, was in fact aware, prior to the enactment of the legislation, that existing large-scale hydro generators would be the exception.

² Mr de Geest, *Proof Committee Hansard*, 2002, p.7.

³ AGO, *Submission 39*.

The Chair's report itself acknowledges that "the final legislation allowed existing generators to use these gains to provide incentives to maintain investment in existing infrastructure." In fact, the report relies on the Government's prior knowledge of these windfall gains to justify its recommendation that now is not the appropriate time to deal with the issue – the rationale being that to do so would signify a policy shift, not simply a correction of an administrative error!⁴

Of further concern in relation to crooked nature of the scheme, is the evidence provided by the AGO that prior to the enactment of the legislation, the expectation was that existing hydro schemes would constitute about 25 per cent of the measure and that "the inclusion of existing hydro would allow the smooth development of the market and actually decrease the cost of the measure to liable parties."⁵ This statement suggests that the baseline provisions were introduced as a compromise to industry and designed to produce cheap (no-cost to the generator) RECs which could be expected to drive out of the market the more expensive wind and solar generation. If this is the case it is a serious matter indeed and undermines the whole objective of facilitating additional, competitive renewable energy generation.

In the interests of accountability and transparency, the Democrats argue that prior to the debate on these bills, the Senate should be advised:

- a) what the Government's intentions were in creating this windfall gain for existing hydro generators and whether this included lowering the cost of the measure for industry;
- b) what knowledge the Government had prior to the enactment of the legislation of the likely extent of these gains, especially for Hydro Tasmania;
- c) whether the Government's argument that the legislation was designed to enable existing hydro generators to invest in the maintenance and upgrade of their assets was meant to infer that there was no expectation that hydro generators would have to invest additional capital to create their RECs in the first place;

⁴ We think it significant, however, that many of those involved in negotiations over the original bills did think that the problem was largely caused through an administrative error. According to our sources, while it was generally known that existing hydros may be able to earn cheap RECs from the baseline determinations, it was not thought that the number of cheap "no cost" hydro RECs would be anywhere near as large as is now projected. We are also informed that the issue of 'unders and overs' was not spelled out during the negotiation of the MRET scheme as is claimed in the Chair's report.

⁵ Ms Cullen, *Proof Committee Hansard*, 2002, p.66.

- d) why these gains to hydro generators were not canvassed in the regulation impact statement into the original bills and
- e) why the Government is not now prepared to correct the problem.

There are also questions to be answered in relation to the Government's compliance with the Competition Principles Agreement, specifically the legislation review requirements. Clause 5 states that:

The guiding principle is that legislation (including Acts, enactments, Ordinances or regulations) should not restrict competition unless it can be demonstrated that:

- a) the benefits of the restriction to the community as a whole outweigh the costs; and*
- b) the objectives of the legislation can only be achieved by restricting competition.*

The Democrats disagree with the Chair's recommendation that further consideration of this issue should be left to the review. Instead, we argue that there is danger in not moving to fix this problem now since the review is not likely to be completed until 2004, with any potential changes to the legislation possibly delayed until that year or later. By this time, enough no-cost RECs will have been produced to have substantially undermined the objectives of the legislation.

The Democrats will therefore be moving amendments to fix the "unders and overs" problem and to change the way in which baselines are determined for existing large-scale hydro generators. We will also seek to increase the target to 10%, because in our view, in addition to fixing the loopholes in the scheme, this is the best way to ensure that new and existing renewable energy projects continue to be developed, and achieve the high level of job creation that was anticipated.⁶

⁶ An increase in the target is particularly needed since it is estimated that due to the overall increase in electricity consumption in Australia, the current 9500 GWh target is only projected to account for between 0.5 to 0.9% of electricity production.

Appendix 1

List of Submitters

1	Mackay Sugar Co-operative Association Limited	QLD
2	Bioenergy Australia NSW	
3	PV Solar Energy Pty Ltd	NSW
4	Australian Consumer's Association	NSW
5	CSR Sugar	QLD
6	Huon Resource Development Group	TAS
7	Basslink Concerned Citizens Association	VIC
8	Climate Action Network Australia	NSW
9	Moreland Energy Foundation	VIC
10	Environment Victoria	VIC
11	Country Energy	NSW
12	Conservation Council of Western Australia Inc.	WA
13	Pacific Hydro Limited	VIC
14	Greenfield Resource Options Pty Ltd	QLD
15	Greenpeace Australia Pacific	NSW
16	Energy Developments Ltd	QLD
17	National Association of Forest Industries	ACT
18	Sustainable Energy Authority	VIC
19	Plasmatronics Pty Ltd	VIC
20	Stanwell Corporation Limited	QLD
21	Australian Business Council for Sustainable Energy	VIC
22	Pacific Solar Pty Limited	NSW
23	Hydro Tasmania	TAS

- 23a Hydro Tasmania TAS
- 23b Hydro Tasmania TAS
- 24 Origin Energy Limited SA
- 25 Southern Hydro Partnership VIC
- 25a Southern Hydro Partnership VIC
- 26 Renewable Energy Generators of Australia Ltd TAS
- 28 Ergon Energy QLD
- 29 NEG Micon Australia Pty Ltd VIC
- 30 Western Australia Sustainable Energy Association WA
- 31 CSIRO Division of Energy Technology NSW
- 32 Australian Wind Energy Association VIC
- 33 Tasmanian Government TAS
- 34 Mineral Policy Institute Inc NSW
- 35 Mr Robin Chapple MLC WA
- 36 Forestry Tasmania TAS
- 36a Forestry Tasmania TAS
- 37 Enertrade QLD
- 37a Enertrade QLD
- 37b Enertrade QLD
- 38 Newwood Holdings Pty Ltd TAS
- 39 Australian Greenhouse Office ACT
- 40 Mr Tim Le Roy VIC
- 41 Bundaberg Sugar Ltd QLD
- 42 Vestas International Wind Technology A/S and Vestas Australian Wind Technology Pty Ltd DENMARK
- 43 Queensland Government QLD
- 44 Snowy Hydro NSW

Appendix 2

List of Witnesses

Canberra – Friday 15 November

Hydro Tasmania

Mr Geoff Willis, CEO

Mr Albert DeGeest, General Manager Markets and Trading

Mr John Titchen, Manager Renewable Strategy

Energy Developments Ltd.

[by teleconference]

Mr Paul Whiteman, Managing Director

Bill Lazarus, Chief Operating Officer

Craig Allen, Group Manager - Commercial Service

CSIRO Division of Energy Technology

Mr Wes Stein

Renewable Energy Generators of Australia

Hon. Peter Rae AO, Chairman

Mr Anton Kubler, GE Australia

Mr Rob Jackson, Southern Hydro

Mr Kevin Ly, Snowy Hydro

Australian Business Council for Sustainable Energy

Mr Ric Brazzale, Executive Director

Pacific Hydro

Mr Andrew Richards, General Manager Sales and Marketing

National Association of Forest Industries (NAFI)

Ms Kate Carnell, Executive Director

Mr Phil Townsend, Deputy Executive Director

Enertrade

Mr Michael Cavell, Chief Executive

Mr Don Woodrow, Manager Regulatory Affairs

Mr Warren Saunders, Power Agreements Manager

Western Australian Sustainable Energy Association

Mr Matthew Rosser, Chair

Conservation Council of Western Australia

Ms Rachel Siewart, Coordinator

[By teleconference]

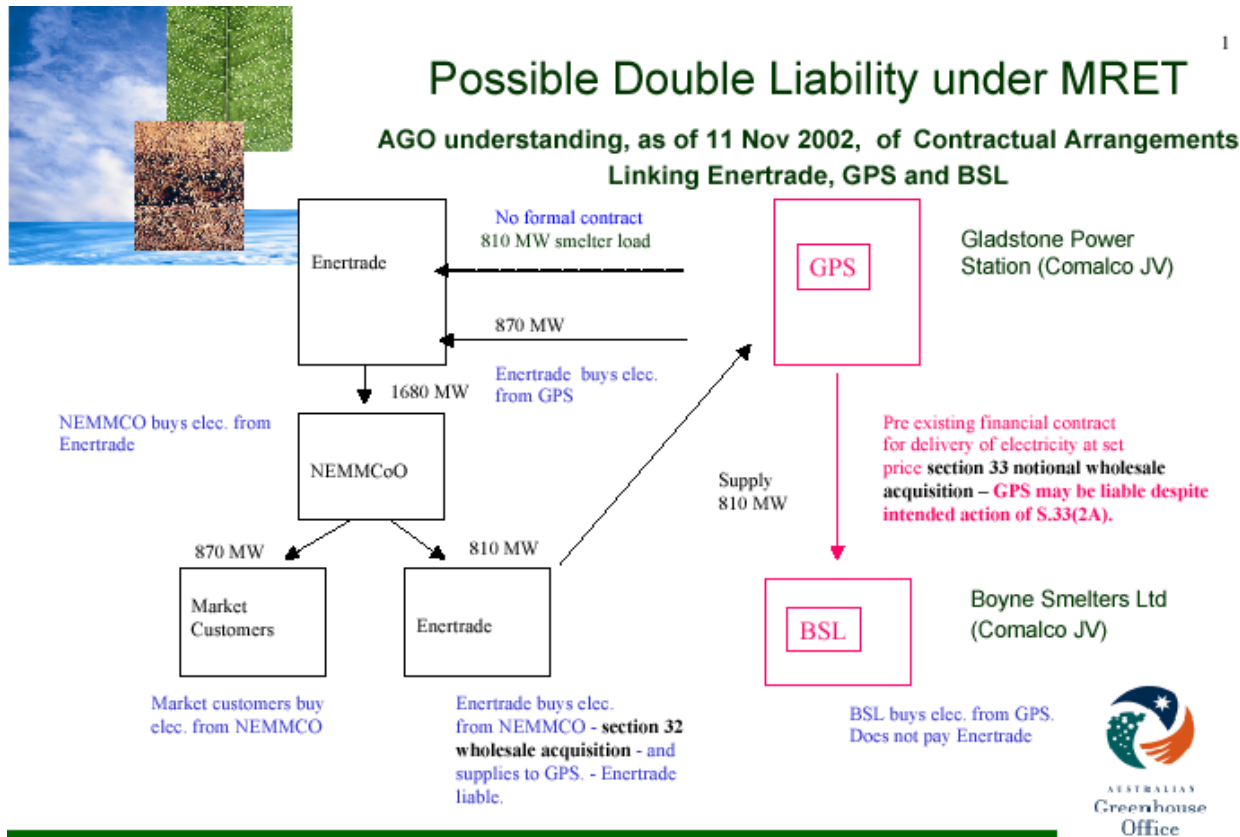
Australian Greenhouse Office

Dr Diana Wright, Senior Executive Manager – Sustainable Energy Group

Ms Janine Cullen, Manager – Energy Futures Team

Appendix 3

AGO understanding, as of 11 Nov 2002, of Contractual Arrangements Linking Enertrade, GPS and BSL



Mandatory Renewable Energy Target - Liability.

Who is liable?

The Mandatory Renewable Energy Target applies to all wholesale purchases of electricity on grids of greater than 100 MW of installed capacity. All of the major grids across Australia and a small number of more isolated grids supplying regional areas are covered.

Under the mandatory renewable energy target, a grid is defined as a network of transmission and/or distribution lines that connect a generator to an end-user. As soon as a grid reaches the 100 MW cutoff, the wholesale electricity purchases on the grid become liable. Grid operators are obliged to inform the Renewable Energy Regulator, within 28 days, of any changes to an existing grid that triggers the 100MW threshold for liable grids under the measure.

In calculating the installed capacity of a grid, the grid operators can exclude standby or emergency plant and privately owned grid connected domestic generators. Stand by plant is any plant that for three successive years:

- ◆ produces less than 50 GWh per annum; or
- ◆ has less than a 5% load factor.

Liable Purchases

The *Renewable Energy (Electricity) Act 2000* establishes two types of liable purchases, called relevant acquisitions:

- ◆ wholesale acquisitions; and
- ◆ notional wholesale acquisitions.

Sections 31 – 34 of the *Renewable Energy (Electricity) Act 2000* cover liable transactions under the mandatory renewable energy target.

While individuals should review the legislation to determine if a particular transaction is liable, the legislation sets out some basic principles for liability*:

- ◆ where the electricity is purchased directly from the wholesale electricity market (or pool) in States in the National Electricity Market (NEM), this is a wholesale acquisition; where the electricity is purchased directly from a generator by a party registered as a market participating NEM States, this is a wholesale acquisition;
- ◆ where the electricity is purchased directly from the generator by the person or company which actually uses the electricity, but the purchaser is not a registered NEM market participant, the generator is considered to be acting as the electricity retailer and is liable as a notional wholesale acquisition; and

- ◆ where the electricity is purchased directly from a generator in a non-NEM State and where the purchaser on-sells the electricity (eg an electricity retailer who is acting as an intermediary between the generator and the user), the intermediary is liable.

* NOTE: The Office of the Renewable Energy Regulator advises individuals or companies to seek their own advice regarding liability and takes no responsibility for any decisions made on the basis of this fact sheet.

Determining Liability

The renewable power percentage (RPP) is used to determine liability for renewable energy certificates. After determining the amount (in MWh) of liable electricity purchases for which an individual liable party is responsible, this amount should be multiplied by the RPP.

For example, in 2001 the renewable power percentage is 0.24%. If liable party A purchases 100,000 MWh of liable electricity, they will need to surrender 240 RECs to the Renewable Energy Regulator in order to discharge their liability.

The renewable power percentage will increase each year during the implementation of the measure, to take account of the growing target. The renewable power percentage for subsequent years of the scheme are required to be issued by 31 March of each year.

Measuring Liability

For electricity transmitted or distributed through the grid and purchased either from a wholesale market or directly from a generator, the metering is required to take place at the purchase point by the liable party.

The regulations require that liable parties ensure that adequate metering is installed at the points where metering is required to allow the liable party to determine the sum of their relevant acquisitions. These points can be different depending on the type of customer, jurisdictional metering requirements and dispatch characteristics of the generator.

How to discharge liability

Liabilities accrue on a calendar year basis. By 14 February of the following year, liable parties are to report on compliance to the Renewable Energy Regulator. Liable parties must submit an annual energy acquisition statement, advising the Regulator of the total electricity purchased as relevant acquisitions in the year and the renewable energy certificates which are offered for surrender against the liability.

If the liable entity owns a greater number of renewable energy certificates than required to discharge any particular year's liability, they can either carry forward a surplus to the following year or sell any additional RECs to other parties.

Penalties

If a liable party is unable to discharge its liability for a particular year, but the shortfall in RECs is less than 10% of the party's total liability, the shortfall will be carried forward into next year's liability. The liable party therefore has to meet their next year target plus the shortfall from the previous year in order to discharge their liability.

However, if the shortfall is greater than 10% of the total liability, a penalty payment of \$40 per MWh, called the renewable energy shortfall charge, will be imposed by the Renewable Energy Regulator. The \$40 must be paid for the whole of the shortfall. As RECs represent one MWh of electricity, the liable party must pay \$40 for every REC they did not surrender.

However, where a liable party is able to meet their liability and make up the shortfall, the penalty can be paid back. The shortfall must be made up within 3 years of when it occurred for the penalty to be refunded. Penalty payments can also only be refunded in years when the previous year's liability was completely discharged. For example, a shortfall payment in respect of year 1 can be redeemed on 14 February of year 3, if the liable party completely met the year 2 liability and surrendered additional RECs to make up the shortfall of year 1.

Liable parties with a shortfall of greater than 10% are to provide an annual energy shortfall statement to the Regulator by 14 February. Payment of the shortfall charge is to be made by this date. The Regulator may publish a list of those liable parties that do not discharge their liability for the year.

For further information contact the Office of the Renewable Energy Regulator at:
www.orer.gov.au

or by phone on (02) 6274 2192