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The Energy Security Board

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Cc CER, CCA, ACCC, National GreenPower Steering Group, National Greenhouse Accounts Team.

RE: Submission on the National Energy Guarantee Consultation Paper

This submission is not confidential and it is hoped that all submissions will be published as quickly as possible.

To the Energy Security Board and Federal Government

Thank you for the opportunity to provide a submission on the design elements of the National Energy Guarantee.

In this submission, I will be focussing attention on Section 3 relating to the emission requirements and greenhouse accounting framework that would be necessary for the mechanism to work and co-exist with retail markets and consumer demands and claims. This is an extremely important foundation to the success of the mechanism and future security of the wholesale and end user markets of electricity. I have also provided short comments on Section 4 and Section 5.

As a former Principal Climate Change Advisor working in a major water utility and the former Chief Executive of the Conservation Council of South Australia, I have a background in greenhouse gas emissions reporting, energy procurement, and participating in the processes for national and state greenhouse and energy schemes. This includes the Renewable Energy Target, The National Carbon Offset Scheme, The National Greenhouse and Energy Reporting Framework, GreenPower and Australian Energy Market consultation. At the state level in South Australia, I served in the Premier's Climate Change Council (2011-2014) and on the Essential Services Commission of South Australia – Consumer Advisory Panel (2011-2017).

I also actively contributed to the WRI Greenhouse Gas Protocol development on Scope 2 Emission Reporting Guidance which is now part of the GHG Protocol suite of documents. This enabled the recognition of contractual greenhouse gas emissions accounting in jurisdictions. I note that the NEG, in its focus on retailer Greenhouse Gas (GHG) emissions, will necessarily incorporate contractual GHG accounting and monitoring, as the previous state grid average approach is not suitable for this purpose.

Executive Summary

The National Energy Guarantee differs from the previous Carbon Pollution Reduction Scheme Proposal and the terminated Carbon Pricing Scheme as the emissions constraint is applied to retailers rather than those that release Scope 1 emissions. This creates the need for a contractually based emissions accounting and allocation framework (contractual GHG accounting), so that emissions intensity rates can be traded and transferred to retailers.

The Proposal also proposes to exempt Energy Intensive Trade Exposed Industries from any obligation to purchase emissions constrained electricity, and pledges to support retail renewable energy such as GreenPower. By design, the scheme establishes three groups of end users being: 1) pool customers that purchase electricity from a retailer's mix (pool) of electricity which is

constrained by the NEG; 2) EITEI businesses that choose contracts of emissions higher than the NEG constraint; and 3) Accredited retail renewable energy customers.

Contractual GHG Accounting

It is proposed that the contractual emissions accounting framework required in order for the NEG to work, be extended to the end use customers. This will mean that the emissions intensity value communicated on electricity bills, for NCOS, for Carbon Neutral Claims and for NGER Scope 2 emission reporting will actually align with purchasing choices.

Energy Intensive Trade Exposed (EITEI) Industries

The proposition that EITEIs should be fully exempt is based on an assumption that polluting electricity is more expensive than renewable electricity. This assumption is challenged. The ESB should consider that this scheme is of a different nature to the RET which had an inherent structural design flaw of where Large Scale Certificates were separated from the electricity and then traded as a penalty cost to retailers, with cost passed through to customers and GreenPower customers.

Under the NEG However there is unlikely to be any certificate cost to avoid and, the contracting will better relate to the true cost of generation. It is predictable that many EITEI eligible companies may not seek to use the mechanism as they could get better deals that comply with the NEG and with GreenPower reform, some may also choose accredited renewable electricity.

Where an EITEI chooses to purchase more polluting electricity that exceeds the NEG constraint, they would be legally allocated those emissions and be required to report those higher scope 2 emissions under their NGER reporting obligations.

Re-Evaluation of the role of RET Large Scale Certificates.

As soon as the RET is achieved the effectiveness and purpose of Large Scale Certificates must be fully re-evaluated as it would be inefficient to have continued trading and compliance for certificates of near junk value. If the objective is to ensure that renewable energy does not fall below the percentage or MWh of the RET Target, then the Government could offer some alternative incentives for specific projects such as through ARENA.

Calculating the Emissions Constraint

The NEG emissions constraint would be determined across the combined EITEI and NEG covered customers but must exclude the electricity sold to customers of retail accredited renewable electricity.

It makes no sense to apply an emissions constraint to accredited renewable electricity. It is essential that GreenPower customers be legally allocated zero scope 2 emissions and their purchase not be undermined by the framework by somehow enabling retailers to purchase more polluting electricity (as is the current proposal).

GreenPower and the Voluntary Surrender of Large Scale Certificates

The term “green schemes” is offensive and out of touch with those businesses, households and government (local, state and federal) customers that are seeking to buy and claim use of accredited renewable energy and lower emissions.

The situation of retail renewable energy and claims has become farcical in Australia with double and triple counting the norm and no legal framework to guide the single allocation and use of accredited renewable energy to customers. The ESB must take this opportunity to advocate for the reform greenhouse accounting generally and GreenPower specifically.

It is recommended that the mechanism to voluntarily surrender Large Scale Certificates to the Clean Energy Regulator be merged with the GreenPower Mechanism. Certificate only options should be abandoned as without bundling, they are not consistent with contractual accounting of electricity emissions. The single market accreditation framework should be for GreenPower electricity with all the attributes bundled into the one product option.

Reliability Guarantee

The Reliability Guarantee mechanism through retailer obligations may not be the best way to assure regional grid reliability. The NEM to date has lacked planning and a process to guide transition. Better planning and monitoring is needed to ensure that regions of grids address vulnerabilities. This means taking the right action (but no more) to ensure measures in new infrastructure add reliability components as necessary. Gold plating reliability would not deliver lower prices to customers.

Carbon Offsets

The use of carbon offsets is rejected as this will compromise the effectiveness and efficiency of the NEG to transition to clean, reliable and lower cost electricity. Incorporating offsets into an already complex mechanism could make the entire scheme unworkable. The emission values (tonnes CO₂-e Scope2/MWh) would no longer have meaning as the value would change and the measurement units are (tonnes CO₂ Scope 1 sequestered or prevented/ multiple activities such as tree planting) are just not compatible with the objective to reduce emissions of electricity generation.

3 Emissions requirement: Energy Security Board design elements

3.1 Overview

RESPONSE ON RETAILER ACCOUNTING FRAMEWORK

The fundamental difference between the NEG and the previous Carbon Pollution Reduction Scheme and Carbon Pricing Mechanism is that the NEG will require contractual greenhouse accounting to work. Previous efforts to adopt contractual greenhouse gas emissions accounting for the electricity sector have been strongly opposed by successive governments which has caused significant barriers for end user renewable energy consumers, because there is no defined legal allocation of emissions to any type of consumer. The NGER Framework uses a physical accounting approach to allocate the emissions from electricity sent out to the grid, across all users of the grid. This approach could not continue to be applied to electricity retailers and end users of electricity under the NEG, and indeed, it has never worked for GreenPower customers as their claims of reduced emissions are 100% double counted.

RESPONSE ON THE ELECTRICITY GRIDS INCLUDED IN THE FRAMEWORK

The NEG should be applied to the physical infrastructure that is the Eastern Australia Grid rather than what is defined as the NEM. This is because Tasmania will continue to trade electricity (and integrated emission values) via the Basslink cable, whether they remain in or are segregated from the NEM.

The NEG should also be applied to the West Australian Grid and Northern Territory Grid in separate but parallel schemes with the same rules, and to smaller settlement grids above a given threshold.

There is no justification for Western Australia and Northern Territory to avoid the transition to clean and reliable electricity at an affordable cost.

Climate response and energy security are national issues.

3.2 Applying the emissions requirement

3.2.1 Entities covered by emissions requirement

Questions for stakeholder consultation

- **What are stakeholders' views on whether the compliance year should be a calendar year or a financial year, noting that EITE exemption processes under the RET use calendar years, whereas emissions reporting obligations relate to financial years?**

RESPONSE

Change EITEI compliance requirements and RET requirements to financial years to align with business annual reporting, sustainability reporting, and NGER emissions reporting.

3.2.2 Calculation of load

Questions for stakeholder consultation

- **What are stakeholders' views on the process to calculate a retailer's load?**

RESPONSE

The retailer's load that is covered by the emissions constraint is just one of three MWh components that should be documented by the framework.

The three retailer loads that must be covered are:

1. Electricity sold under the NEG emissions constraint
2. Electricity sold to EITEI customers under no constraint, where the additional GHG burden is transferred to customers where the constraint is applied
3. Accredited renewable electricity sold to customers that voluntarily buy electricity of zero Scope 2 emissions.

Special note on EITEI arrangements

The case for exempting Emissions Intensive Trade Exposed Industries from the NEG has not been made. The falling costs of renewable energy generation and the emergence of grid scale electricity storage now means that such industries can, and should, actively participate in the transition to renewable energy.

It can be argued that the faster we collaborate with large scale EITEIs in the transition to renewable energy, the more competitive Australia will become. The whole of Australia is transferring towards being active participants in the energy market, contributing with on-site and dedicated decentralised electricity generation and storage. That special arrangements for large energy users such as aluminium smelters and copper refineries would continue is odd. It leads to the failure of businesses to innovate and creates over-dependence on all other users to pay for the reliability and emissions. The exemption of EITEIs simply sends the message that EITEIs can be lazy in energy transition and depend on everyone else.

It is predictable that as renewable energy and storage options become cheaper, a growing number of EITEI companies will not depend on this special arrangement.

3.2.3 Calculation of emissions per MWh

Questions for stakeholder consultation

- **What are stakeholders' views on how a retailer's emissions should be determined?**

ANSWER

In regard to the statement: "Determine the emissions associated with contracts where the emissions per MWh are not specified", the simple answer is that it will be necessary for all contracts to incorporate a Scope 2 emissions intensity value per MWh. This contractual accounting framework is the logical approach that will underpin the transition to renewable energy and a low-carbon economy. For the first time, the emissions intensity of electricity traded in wholesale and retail markets to end users would properly integrate greenhouse gas emission components. Ideally, the contractual greenhouse gas accounting framework would also integrate the Scope 3 GHG components to provide billing information to end users.

The current National Greenhouse and Energy Reporting (NGER) scheme cannot be used for emissions calculations in its current form as it does not adopt a contractual accounting approach for retailers and end users. Whilst some elements of NGER Scope 1 reporting are relevant, there is a need to develop a new system of algorithms that can be deployed in order to account for and combine multiple sources of electricity in a retailer's supply mix at varying emission intensities.

The NEG emission constraint should serve as the maximum allowable emissions/MWh but should in no way prevent a retailer from buying and selling electricity at much lower emissions than the constraint. Indeed, where a retailer seeks to only buy or sell renewable electricity at zero Scope 2 emissions, they should be free to do so and would obviously be operating without NEG emission constraint obligations.

Given that emissions information will be tracked to the retailer, the framework should also incorporate a framework to disclose this information to end users in direct relation to the electricity they are paying for.

3.3 Contracting and emissions

3.3.1 Contracts that specify a generation source

Questions for stakeholder consultation

- **What are stakeholders' views on the methods for determining the emissions to assign to contracts where the generation source is specified?**

RESPONSE

The contractual greenhouse gas emissions accounting framework should provide a trackable assurance statement, which includes all necessary attributes and elements required for the NEG, for the voluntary purchase of accredited renewable energy and customer disclosure of end user GHG Scope 2 and Scope 3 emissions. This is the only way to provide credible end user options for electricity consumers to make a GHG choice regarding their electricity.

It is acknowledged that this approach has been blocked in the past. However, it is worth noting that small, medium and large end users are already making claims to assign or associate their power purchase agreements (PPAs) to generation sources.

This is being done without a legislated contractual emissions accounting and allocation framework, and results in complete double counting of emissions and renewable energy use claims.

The NEG must plan ahead for a contractual framework which deals with all the elements of a low-carbon economy. For example:

- If the South Australian Government wishes to create a zero or low-carbon hydrogen fuels export market to export South Australia's renewable energy, it needs to be able to demonstrate that only renewable energy is allocated towards the electrolysis chilling and compression processes used to create the hydrogen gas.
- If a vertically integrated solar/wind-farm generator and retailer, or even a retailer which chooses to sell renewable energy, they will require a contractual GHG accounting framework to assure that the integrity of renewable energy is preserved throughout the market chain.
- If there is a claim that a grid-scale battery or pumped storage mechanism is storing only renewable energy at zero Scope 2 emissions, the NEG framework must have a way of assigning renewable energy to the storage, then on to their retailer and on to the end user customer. This is not a far-flung notion, as convention has already been established in the claims being made by state governments and others suggesting that batteries and pumped storage store renewable energy, even in state grid systems where the majority of electricity generation is coming from fossil fuels. For example, the South Australian Labor Party has announced a 25% Renewable Energy Storage Target if re-elected.
- Electric vehicles are often touted as zero emission transport, yet the electricity from the grid used to charge these vehicles is a mixture of sources and average emissions per state, so the claim is currently false. Even with electric vehicles charged from onsite renewable energy produced and consumed behind the meter, the National Greenhouse Accounts Team has confirmed that these renewables are estimated and fed into the state NGA Grid factor calculations as well. So here too is another form of double counting.

In summary, the NEG contractual GHG emission accounting and allocation framework will need to track and fairly allocate emissions throughout the market chain from generation to end users. This would include:

- household and business *behind the meter* generation and use
- generation emissions (Scope 1 & 3)
- allocation to storage (pumped and battery)
- allocation to retailers and retail electricity to end user markets
- adjustment for losses across the various parts of transmission, storage and distribution.

- **If the contract specifies a portfolio of plants and the plants have differing emissions profiles (e.g. some are zero-emissions plants and some are gas plants, used for firming the variable renewable energy), how should the emissions per MWh under the contract be determined?**

RESPONSE

It should be up to the retailer to apply the algorithm of the contractual GHG emissions accounting and allocation framework to determine the attributes of their end-product or products to electricity end users. This would apply to the three different types of

electricity sales identified in the consultation paper, being:

1. Electricity sales to EITEIs
2. Electricity sales to customers not specifying renewable energy
3. Electricity sales to customers specifying accredited renewable electricity

For an EITEI with no emission constraint, it would be possible for the retailer (or PPA) to be allocated higher emissions products from coal and gas should they be able to reduce costs in such a contract. They should also be free to choose electricity sold within the NEG constraint or accredited renewable electricity.

3.3.2 Contracts that specify emissions per MWh but not a generation source

Questions for stakeholder consultation

- **What are stakeholders' views on how to determine the emissions per MWh to assign to contracts that specify an emissions level but do not specify a generation source?**

RESPONSE

For sales of electricity where the emissions are a mix of sources limited by the NEG constraint but there is no specific request for accredited GreenPower, all components of emissions and firming arrangements should be covered by that mix of infrastructure.

From within the range of contracts that are not segregated as EITEI contracts or sold as accredited renewable electricity, retailers should be free to sell electricity at any GHG Scope 2 intensity so long as they do not breach their overall emissions constraint that applies to this pool (ensuring that contracts to end users for accredited renewable electricity are kept separate and in no way relax the constraint which applies to this supply pool).

- **What are stakeholders' views on how the contract market may evolve to support this type of compliance with the emissions requirement?**

RESPONSE

There is very little change to retail and end user markets to operate in this supply pool which largely aligns to the current standard grid mix that covers all consumers purchasing electricity. Under the NEG operating with contractual accounting, end user consumers will be provided with better information relating to the supply of their electricity and its greenhouse gas emissions.

In fact, there will be an improvement as EITEI contracts for dirtier, more polluting electricity would no longer be picking up the free-ride of lower Scope 2 and 3 emissions being paid for by everyone else, and accredited renewables would also be separate. The actual emissions data printed on the bills of the customers in this supply pool would reflect emissions that are much more aligned with their choice of retailer.

3.3.3 Contracts that specify neither emissions per MWh nor a generation source

Questions for stakeholder consultation

- **What are stakeholders' views on the appropriate emissions level to assign to contracts that do not specify an emissions level or generation source? •**

RESPONSE

There cannot be a partial shift to contractual accounting. It would be like a financial and banking system where half of the customers operate within rules, and the other half of customers make up their own rules.

The NEG proposal talks about a “deemed emissions level” being established by NEM region, to align with current contracting practices, yet such a proposal is not compatible with simultaneous purchasing of electricity from a different region for that same electricity. For example:

- The Hornsdale wind farm in South Australia is contracted to provide accredited renewable energy to the ACT. At the same time, the NGER framework allocates the emissions from this electricity across all South Australian electricity customers with full double counting. Under the NEG, it will be necessary to support the contractual arrangement for this renewable electricity to be traded to the ACT retailer. Therefore, it will no longer be appropriate for this electricity to be allocated to customers in South Australia or those in the region in which the Hornsdale wind farm is located.
- All South Australians enjoy lower emissions due to the fact that the investment in renewable energy driven by the Renewable Energy Target has occurred in South Australia at a higher rate. The lower emissions printed on electricity bills and claimed in NGER Scope 2 emissions by reporting corporations has no regard for the fact that the RET liability payments are taken from across Australia, with a much higher proportion of the funding coming from outside South Australia.

Under contractual accounting the location of the generation must cease to be of relevance, and there is a need for a greater focus on tracking the supply contracts to retailers and then to customers

- **What (if any) impact would these approaches to determining the deemed emissions level have on the liquidity and availability of those types of contracts?**

RESPONSE

A physical GHG accounting approach to deem emissions to a region within a contractual retailer obligation framework would undermine the entire scheme. It would lead to predictable free-riding in certain areas, unfairness of those contracting via the rules, and unknown detrimental consequences.

The only solution is to apply an algorithm that takes into account all of the contributing sources of emissions into such a pool, ensures that the emissions constraint applies to this pool, and allocates the actual emissions from this pool over set periods.

There is liquidity and availability of all types of electricity from across the market. The NEG GHG accounting and allocation framework will be required to establish an online tracking system and necessary algorithms that follow the electricity parcels with their attributes as they pass through wholesale and retail markets in much the same way that parcels can now be tracked through Australia Post until they reach the consumer.

3.3.4 Retailer-owned generation

Questions for stakeholder consultation

- **What are stakeholders' views on how to deal with internal non-contractual arrangements between the retail and generation arms of a gentailer, for the purposes of the emissions requirement?**

RESPONSE

Gentailers like AGL obviously have internal procedures and arrangements to transfer electricity volumes and related data to their retail arms. Jointly owned businesses and partnerships such as Snowy Hydro /RED Energy and Hydro Tasmania/Momentum Energy may have contractual arrangements that differ from those of businesses owned by completely separate entities. It actually does not matter whether the GHG accounting as it passes through these arrangements is achieved through internal procedures or contracts, so long as the transfer of emissions is tracked and the retail arm complies with the requirements under the NEG.

- **What are stakeholders' views on how to determine the emissions level to assign to contracts between the retail and generation arms of a gentailer?**

RESPONSE

As above. It actually does not matter whether the GHG accounting, as it passes through these arrangements, is achieved through internal procedures or contracts so long as the transfer of emissions is tracked and the retail arm complies with the requirements under the NEG.

3.3.5 Unhedged load

Questions for stakeholder consultation

- **What are stakeholders' views on how to determine the emissions level to assign to unhedged loads?**

RESPONSE

As a principle, the GHG accounting and allocation framework should apply to all electricity traded in wholesale and retail markets. There should be no part of the market that is not accountable for the GHG emissions of the electricity being traded. Should part of the market covering unhedged load be unable to account for their GHG emissions of the unhedged pool across a given period of time (say a 3-month period), then I agree that: "the emissions per MWh of the highest-emitting plant operating in the NEM should be applied".

3.4 Flexible compliance options

3.4.1 Carrying forward overachievement

Questions for consultation

- **Should the emissions requirement allow for unlimited carry-over of overachievement or specify limits on the carry-over of overachievement?**

RESPONSE

Carry-over arrangements for overachievement are extremely problematic. Where the NEG constraint set by the government is too generous, so-called overachievement may carry through to subsequent years causing a cascade of delay in the transition to new low-carbon electricity generation. For this reason, there should be no unlimited carry-over arrangements. To leak emissions in overachievement carry-over arrangement may also compromise the integrity of the emissions intensity values of retail electricity sold.

In fact, any carry-over arrangements should be limited to the smallest period possible, as the electricity is being sold to retail customers and those retail customers have every right to expect that their retailers are complying with their requirements and providing accurate information about the greenhouse gas emissions of the electricity they are buying.

- **If limits are to be specified, what should those limits be and how should they be designed? For example, should the size of limits vary inversely with the size of the retailer's load? This could give more flexibility to smaller retailers.**

RESPONSE

Limits to carry-over arrangements should be as tight as possible, providing only sufficient flexibility for retailers to resolve accounting issues.

- **If limits are to be specified, how should overachievement in excess of the limits be treated? Should there be a process by which it is offered to the market?**

RESPONSE

The double dipping proposal is rejected. Retailers are able to bid for the electricity they need from the market. The electricity they purchase under this contractual GHG accounting approach is intrinsically connected to the emissions of that electricity. Any subsequent sale of an emissions allowance undermines the integrity of the entire NEG framework as it would no longer be an emissions constraint for every MWh of electricity. It would become an abstract where there could be no confidence that the retail electricity emissions value will actually relate to the electricity traded.

There is an additional issue in that some retailers (separate to their GreenPower sales) may choose to provide electricity at emissions intensity below the NEG emissions constraint. Under these circumstances, there is no justification to carry over or sell emissions allowances or overachievement to other retailers.

3.4.3 Use of offsets

Questions for stakeholder consultation

If offsets are permitted by the Commonwealth Government:

- **Should limits on individual retailers' use of offsets be set at an absolute level, regardless of retailer size? An absolute limit would represent a greater proportion of a smaller retailer's emissions than a larger retailer.**

RESPONSE

Offsets should simply not be used in this framework because the whole idea of the framework is to transition the electricity sector to clean, reliable electricity. The government sets the emission constraint. Should the government allow offsets, it will need to set a tighter NEG emission constraint to achieve the transition that it seeks.

This scheme is already over-complicated. The inclusion of offsets will make it totally unmanageable, and render the emission values associated with electricity contracted to and from retailers as totally lacking accuracy and integrity.

- **Or, instead, should limits on individual retailers' use of offsets be based on the size of retailers' loads, such that offsets represent the same proportionate share of retailers' emissions regardless of retailer size?**

RESPONSE

As stated above, offsets should simply not be used in this framework for the reasons listed.

- **What are the pros and cons of each of the above approaches?**

RESPONSE

As stated above, offsets should simply not be used in this framework for the reasons listed.

- **If limits on use of offsets are independent of retailer size, how should the risk of large retailers splitting into several smaller entities for the purposes of increasing their overall offset limit be addressed?**

RESPONSE

As stated above, offsets should simply not be used in this framework for the reasons listed.

- **What (if any) requirements to use within-NEM opportunities before using offsets are appropriate?**

RESPONSE

As stated above, offsets should simply not be used in this framework for the reasons listed.

3.5 Interaction with voluntary 'green' programs

The terminology used by the ESB is insulting and demeaning. Please refer to retail accredited renewable energy products. This should only be about GreenPower and the voluntary surrender of LGCs. I argue that offsets have no place in retail energy products as they create further double counting. For example, some retailers can sell LGCs as GreenPower from, say, a wind farm, and then sell the electricity bundled with cheap offsets as "green energy". Customers are unable to follow the complex detail, and the end result is a confusing greenwash over two claims. This should be stopped. If a retailer chooses to sell a dirty electricity product they always have the action to sell a carbon offset from tree planting or similar but this should be shown as a separate transaction.

Before answering the questions relating to how the NEG will interact with electricity sold as accredited renewable energy, it is worth reflecting on the current situation where GreenPower and the voluntary surrender of Large Scale Certificates has been operating outside any legal framework and outside of the NGER determination. At a time when the purchase of renewables is sought as a mainstream part of the market, the Federal Government, COAG, the Australian Energy Market Commission and now the independent Energy Security Board (ESB) continue to place GreenPower last in the list of priorities and marginalise it as a 'green notion'. This simply shows how out of touch the rule-makers are with what the market is already demanding. Does the ESB have any idea of how farcical renewable energy claims have become in Australia because the Federal Government has failed to integrate a retailer renewable energy and end user set of rules into the national NGER Framework? Here is a summary of the historic and recent situation:

CASE STUDY The farcical situation of renewable energy end user claims in Australia

Over the past 12 years there have been calls for reform to create a legal, logical and single allocation of renewable energy and reduced emissions to end users. Successive Federal Government departments have steered discussion away from reform. Calls for reform in the 2010 consultation on Scope 2 emissions were rejected. In the period of the COAG complementarity principles, reforms were again blocked. Voluntary renewables collapsed further as customers continued to be charged the carbon pass through costs, and governments deemed the purchasing of renewables as non-complementary. In relation to NGER consultations, the Federal Government Department avoided public acknowledgement of the issues being raised and failed to address concerns raised. It was also reluctant to publish NGER related submissions and quickly deleted old submissions.

There is a long and documented history of concerns raised about GreenPower and, without repeating the technical aspects, my submission on the GreenPower Review covers the issues of a system without rules and riddled with double and triple counting. See:

[Tim Kelly Submission](#)

<http://www.greenpower.gov.au/Business-Centre/Program-Review/~/media/4488FFC5C5B04BACAEA881E393F33BB8.pdf>

[Tim Kelly Submission - Summary of Recommendations](#)

<http://www.greenpower.gov.au/Business-Centre/Program-Review/~media/6DDD9A53908E49AA9BE6A0AE098154AA.pdf>

Now, in 2018, there are new developments with large government PPAs and an explosion of business PPAs. Many of these are claiming to be renewables, or coming from renewables. The trouble is that there is virtually no way to understand whether these claims include surrender of LGCs to ascertain if they are the second or the third count of the same renewable energy. Even if they do include the LGCs, this actually means nothing in terms of entitlement to claim use of renewables and lower emissions.

The South Australian State Labor Government in late 2017 and early 2018 has been using the term "coming from renewables" to claim or imply that they are switching to 80% renewable Energy in 2018, and 100 % from 2019 through a PPA with Simec Zen, but they won't say if LGCs will be voluntarily retired.

The South Australian Government is also claiming to support a "Green Hydrogen" plant to produce and export hydrogen from South Australia's renewable energy, but won't advise if the planning includes accredited renewables as GreenPower or voluntary surrender of LGCs to for the electrolysis, chilling and compressing of the hydrogen.

Adelaide Brighton Cement have announced a renewable PPA but have not responded to clarify whether the PPA arrangements include the surrender of LGCs, and this is despite making contact with the company.

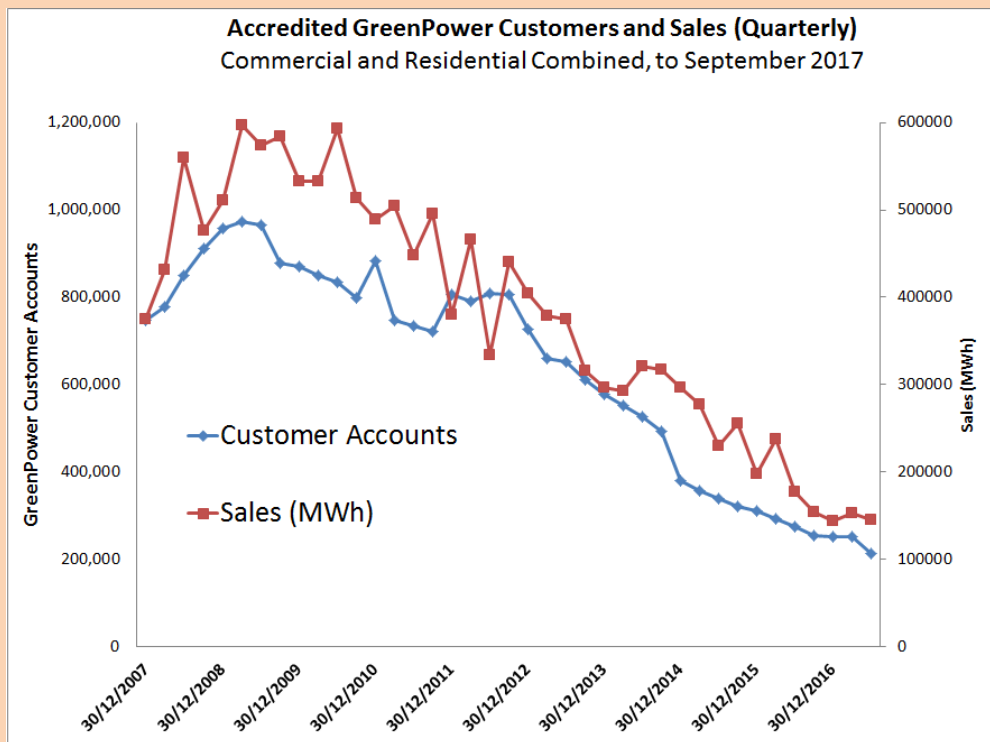
If we include the rise of electric vehicles into the mix, the situation is set to become even more of a wild west

renewables claims market unless there is real reform. Also, consider the rise of batteries up to the 100 MW Tesla battery, where there are claims that these store renewables (rather than grid mix power). There are also an ever-growing number of other businesses, universities and communities all making claims on renewables every week, some with retirement of LGCs and many without.

The approach by successive federal governments has been to let things go. It has never been the right time to address the basic accounting and allocation framework to underpin a low-carbon renewables economy. The Federal Government pulled out of the National GreenPower Steering Group (where it participated with observer status) but maintained both the voluntary surrender approach and GreenPower in non-legal supplementary NGER reporting via the NCOS carbon neutral program for those claiming use of renewables and carbon neutrality.

Most businesses and Governments (local state and possibly federal) have abandoned GreenPower (which assures voluntary surrender of LGCs), in favour of manual LGC surrender or no LGCs at all. The direct voluntary surrender option, which is away from public scrutiny and assurance, has emboldened businesses towards not necessarily retiring the LGCs voluntarily or drifting away from purchasing LGCs altogether.

As for the GreenPower program itself, its collapse continues because customers, including governments, councils and businesses, are fully aware that it is a second count of renewables use and is also priced as a penalty rather than an alternative product. Residential customers do not trust the GreenPower scheme with the cryptic marketing language with the cryptic marketing language designed to avoid telling customers that it [the renewable energy] is double counted and not supported in law." At a time when the price of producing renewables has dramatically fallen, there has been no price relief for 100% GreenPower customers (like myself). The GreenPower customer numbers and sales have continued to collapse. At this rate, GreenPower will be extinct within 2 years, if not sooner.



Another development is the looming achievement of the RET. The whole concept of voluntary renewables has been based on being additional to the RET. Additionality has already been eroded by RET reviews and reductions but will soon become a meaningless concept when the RET has been achieved. Some market participants already see LGCs and additionality as redundant and are suggesting that the association with a facility makes the difference for renewables use.

From what I understand, the National GreenPower Steering Group have had discussions with the Federal Government Department following the 2014 RET and GreenPower Reviews, but it does not look like there is much progress and there is certainly no involvement with the public. I am not sure of any dialogue between the National GreenPower Steering Group and the Energy Security Board.

Conclusion

In summary, the situation is a total mess. There is no legal mechanism to allocate any kind of electricity to any end user. Not in NGER, or in the RET legislation, not as green power or non-renewables. Any person or organisation can

make up their own rules and accounting like the ACT Government has done (to claim a percentage of mandatory renewables with the remainder as GreenPower).

The ACCC approach to punish those without LGCs or earlier RECs surrender has now lost its punch, and was all bluff anyway as none of this is covered in legislation. The Federal Government could have legislated a physical accounting approach to legally allocate average emissions to all end users but chose not to do so, probably because this would have killed off voluntary renewables immediately. There is no integrity in the current double and triple counting of end use of renewables and no consistency in claims being made.

There is now a new opportunity through the NEG design, to adopt a contractual accounting and allocation approach that the community, governments and businesses have widely adopted, but which is not yet supported by NGER legislation. It would take a committed effort to work out such an approach that would also deal with the rise of batteries, EVs and losses. In my work with the GHG Protocol, there is no barrier for a nation or state to adopt contractual accounting but I do acknowledge that there are divided views. The Australian situation is different to the US, because our RET is to be reached in just a couple of years. With no further requirements for renewable electricity, additionality to the Renewable Power Percentage becomes meaningless. The allocation of renewable energy to an end use customer (by association) has become the main factor behind renewable PPA claims.

After nearly 8 years since this matter was last considered, now is the time for a genuine approach to build on the NGER Framework to properly allocate electricity related emissions to end users in a way that fully reflects the market choice. The growing flood of renewable energy claims made in complete contradiction to the NGER Framework, with double and triple counting, must stop and GreenPower must be reformed to become the only accreditation approach to assure household renewable energy contracts and business renewable PPAs.

Questions for stakeholder consultation

- **What are stakeholder views on the interaction between the emissions requirement of the Guarantee and voluntary programs such as GreenPower?**

RESPONSE

The proposal outlined in the NEG Consultation Paper is a complete blunder. The Consultation paper proposes a mechanism for GreenPower to be additional, yet would let the retailer emissions level to rise to eliminate the benefit of all GreenPower sold. It is not additional, it is a suggestion to totally eliminate the role of accredited renewable energy in retail markets. It is proposed in a way that gives the retailers and other consumers a mechanism to purchase more polluting electricity.

This proposal would extinguish the entire achievement of emissions reduction by GreenPower customers and must therefore be flatly rejected.

I put this mistake in the same scale of error as:

- The Solar Credits Multiplier which, when introduced, caused every MWh of deemed household solar electricity to displace 5 MWh of renewable electricity already required by law. This issue was pointed out to the Federal Government in advance of the policy coming into force, yet it was implemented with the almost immediate impact of slamming the brakes on the large-scale renewables sector. Within a short time it had to be wound back, but only after substantial changes were made to split the RET into large and small components and reducing the RET by 4000 GWh.
- The **'No action carbon neutral logic'** suggested in the 2011 NCOS consultation paper to try to suggest that because there would be a national target on emissions, every organisation would already be carbon neutral.

The statement read:

If we also consider that, under the cap, the net change in aggregate emissions is zero, if all an entity's emissions were covered by the Scheme it could be considered 'carbon neutral' in the sense that individual emissions have had no net impact on aggregate emissions".

The thinking was hypothetical, ignoring basic greenhouse accounting/any kind of accounting principles and the interaction of policy with people and culture. It also failed to recognise the distrust in an unproven, government-controlled CPRS creation. The Federal Government did not consider that when everyone plays their part in reducing emissions, it makes conditions easier for governments to set more ambitious targets or caps through time.

Whilst the 'No Action Carbon Neutral Logic' was abandoned, the thinking continued in the COAG Complementarity Principles and subsequent Carbon Pricing Mechanism, causing enormous damage to voluntary action and the willingness of Australians to engage in climate mitigation for years.

What the Energy Security Board is proposing in this NEG Consultation Paper is that when a retailer sells GreenPower, the allowable emissions of that retailer can be increased such that the GreenPower customer achievement will be completely extinguished.

SOLUTION

The solution is to exclude voluntary renewables and their emissions savings from the retailer liability calculations altogether, and allow these renewables to be sold to end users at zero Scope 2 emissions.

Similarly, where EITEI companies buy electricity with no emissions constraints they should be allocated the emissions of the source they buy. If they choose dirty electricity, they should be allocated dirty electricity emissions in law. If they choose GreenPower, they should be legally allocated zero Scope 2 greenhouse gas emissions.

For sales of accredited renewable energy, the renewable energy and the firming arrangements should not be polluted by gas or coal firming arrangements. With multiple sources of renewable electricity, including existing hydroelectricity which can be utilised as storage, pumped storage and growing battery storage, it is feasible for accredited renewable electricity sold as GreenPower to be fully segregated from gas and coal firming.

This means that accredited renewable electricity sold should always be legally allocated zero Scope 2 emissions, and in reforming this part of the retail market all of the many different types of double counting emissions benefits can be stamped out and dodgy claims stopped.

In addition, there should only be one way to claim accredited renewable energy instead of the two mechanisms currently in play- being accredited GreenPower and voluntary surrender of RECs to the Clean Energy Regulator. It is recommended that these two mechanisms be merged into one accredited GreenPower scheme, and that this be administered by the Clean Energy Regulator under federal jurisdiction rather than sitting outside the legal framework under a few state Governments and Territories.

Additionality

Whilst the legal allocation of accredited renewable energy to GreenPower customers has always been the most important aspect to me, many others are concerned about the additionality of GreenPower. The additionality of GreenPower has been fully compromised on many occasions.

- Current and previous federal governments have pledged efforts to make GreenPower additional to national commitments and have not done so.
- GreenPower was to have been additional to the RET through being in addition to 45,000 GWh of electricity required under the Renewable Power percentage. However, the RPP has been cut and modified, with governments subsequently advising that the RET was based on a percentage target that covered all renewables both mandatory and voluntary, thereby eliminating the additionality component

It is recommended that, in establishing the NEG greenhouse gas emissions allocation and accounting framework to support GreenPower:

1. **The additionality is restored under the NEG mechanism** – this means that the NEG must prevent the efforts of voluntary GreenPower customers from freeing up emissions for polluting customers.
2. **Further steps are taken to assure national additionality.** This means that the accredited renewable energy sales in Australia are supported to provide faster and additional GHG reductions on top of Australia's international commitments.

Old Renewables including old hydro electricity

Once the RET values/percentage have been achieved, the concept of renewables that are additional to pre-1997 levels becomes meaningless. A reformed GreenPower Accreditation Scheme could be relaxed to enable the old hydro electricity from Tasmania and the Snowy hydro schemes to be sold as accredited renewable electricity. This is particularly important to give fair access to renewable electricity firming arrangements.

It has become a bit of a nonsense where the ACCC criticises Momentum Energy/Hydro Tasmania for selling their renewable electricity as renewable electricity.

It is unlikely however that the burning of wood waste would ever be accepted as acceptable under a voluntary GreenPower scheme.

3.6 Reporting and compliance

It is agreed that it is essential to have a system of reporting and compliance. No such system exists for: 1) what the retailers buy and 2) what they sell to customers. Both of these aspects need to be covered by the NEG Compliance Framework.

3.6.1 The AER as the enforcement agency for the Guarantee

The AER is the wrong organisation to serve as the enforcement agency of the NEG. The AER is an economic regulator and has demonstrated failure in understanding the shortcomings of retail energy markets when it comes to renewable energy, GreenPower and emissions. For over a decade the ACCC and its extension arm, the AER, have failed to address the fundamental issues associated with the double counting of reduced emissions in accredited renewable energy. Furthermore, the ACCC and AER quillotined discussion of the legal shortcomings of GreenPower in how it operates, acting in complete contradiction to the NGER Framework. The organisation misrepresented issues raised, then provided unacceptable answers to their misrepresentation and, when challenged, refused all further communications. The predicted consequence to GreenPower has been collapse of confidence, collapse of sales and collapse of customer numbers at a time when the cost of producing renewable energy has dramatically fallen.

The people at the ACCC and AER have a culture which does not understand the current NGER Framework nor consider what is necessary to make contractual accounting work, either for the retailer or for end user customers.

Whilst it is not the role of a regulator to make the rules, the ACCC and AER should have been acting with due diligence to call out problems in the market and at least call for reform. They have failed to do this.

It is strongly recommended that the Clean Energy Regulator be the enforcement agency for the NEG, not the AER. Furthermore, there needs to be a framework for engagement with GreenPower customers to identify and address issues in how the NEG is supporting GreenPower. The Energy Security Board includes a commitment to supporting the GreenPower framework in *rules under legislation* and oversight, and must now ensure that those customers paying for accredited renewable energy are getting the attributes of use and reduced emissions that they pay for, at a fair price, in a real product.

3.6.2 Compliance registry

Questions for stakeholder consultation

- **What are stakeholders' views on the need for a compliance registry? What are stakeholders' views on its design?**
- **Are there alternative schemes that would allow retailers to monitor and verify compliance with the emissions requirement? How could these alternative schemes work?**
- **Are there any additional features which the registry should have?**

RESPONSE to the three questions above

The Compliance Registry must incorporate algorithms to cover all attributes of the electricity as it enters the market and is traded into the three identifiable streams of end user products 1) unconstrained emissions to EITEIs, 2) NEG emission-constrained electricity to customers that do not specify accredited GreenPower and 3) Accredited GreenPower sales to customers.

There is an additional need to connect firming arrangements and ensure that any emissions associated with supply of firming electricity is associated with that electricity at the retailer stage of the market.

For accredited renewable energy (with GreenPower suggested to be the only method), there will need to be a framework that links only renewable energy firming to the GreenPower sold.

In addition, unlike Large Scale Certificates to date which are nothing more than proof of generation, the attributes of electricity must be connected with the electricity sold. To do this, let's say that we will have an electronic statement for any bundle of electricity generated and sold into the market. This statement, which will include the attributes, can then be entered into the NEG monitoring system.

WHOLESALE and DIRECT PPA NEG STATEMENT

The statement would include the following data:

- Supplier, location of generation, date/date range etc.
- MWh sold (sent into the grid) or to customer in PPA
- Scope 1 emissions intensity of production
- Scope 3 emissions intensity of production (for customer information only)
- Identification of firming supply (where sold direct to customer in PPA)
- **Type of Generation**
 - Coal, Gas, Hydro, Pumped Hydro, Wind, Solar Thermal, Solar PV, Biomass, other

- **GreenPower Accredited Renewable Electricity.** This would integrate the Large Scale Renewable Energy Certificate with a clear statement that the end user buyer of accredited renewable energy has the exclusive right to claim use of renewable electricity and zero Scope 2 emissions for that renewable electricity.

ENERGY STORAGE NEG STATEMENT

- Location of storage facility, date/date range etc.
- **STORAGE IN**
 - MWh
 - Average emissions intensity of electricity contracted to feed in to the storage facility (Based on generation Scope 1 emissions).
 - MWh Renewable - To assure claims that a battery is storing renewable energy only, the source of the renewable energy must be identified and assured (not grid or any pool average).
- **STORAGE OUT**
 - Average efficiency loss
 - Adjusted average emissions intensity of electricity sent through to the retailer or end user customer.

RETAILER ELECTRICITY NEG STATEMENT

The retailers will be able to pool the emissions intensity of different wholesale sources of supply as they see fit, using an auditable software package that can trace back to a source if necessary (It will need to be able to unscramble an egg). to look back into the supply chain.

The retailer will then be able to report on the three different products sent to customers:

- 1) EITEI customer MWh sales at specified emissions intensities above the NEG constraint (Scope 2 & Scope 3 for information).
- 2) Pooled retail electricity MWh sales at a specified average emissions intensity at or below the NEG constraint (Scope 2 and Scope 3 for information).
- 3) Accredited Renewable Electricity MWh sales (suggested as GreenPower only) at zero Scope 2 emissions (and Scope 3 for information only).

CUSTOMER ELECTRICITY STATEMENT (From a retailer or via a direct PPA with a generator provider)

Customer billing information would reflect the actual electricity that is sold to a customer in a billing period and the information would be provided through the billing framework, whether electronic or on printed bills:

- 1) EITEI customer MWh sale at specified emissions intensities above the NEG constraint (Scope 2 & Scope 3 for information)
- 2) Pooled retail electricity MWh sale at a specified average emissions intensity at or below the NEG constraint (Scope 2 and Scope 3 for information)
- 3) Accredited Renewable Electricity MWh sale (suggested as GreenPower only) at zero Scope 2 emissions (and Scope 3 for information only). This would integrate the use and surrender of the Large Scale Renewable Energy Certificate and the exclusive right to claim *use of renewables* and *zero Scope 2 emissions*.

Should any of the data in the registry be made publicly available?

As much data as possible should be accessible to the public, including the sources of supply of a retailer and the volume of MWh per accounting period (3 months or a year) from each of those sources (Coal, Gas, Wind , Solar etc.).

3.6.3 Reporting requirements for emissions requirement

Much of the response to this question is described in the response to the previous section.

3.6.4 Enforcement tools for emissions requirement

The compliance focus is on the retailer obligations to the government, but no attention has been given to the retailer obligations to their customers. The NEG will necessarily create contractual accounting and the ESB has said that it needs to “account for the interaction with voluntary green programs”. Currently under NGER there is no accounting that enables GreenPower, or any form of accredited renewable energy, allocation to end user customers, and indeed no framework to legally allocate any type of electricity or emission to end user customers.

The NEG framework must address all of this. Once a framework has been devised to incorporate contractual greenhouse gas emissions accounting at the retailer and customer level, then compliance arrangements will need to be established to protect customers and ensure that they are getting the electricity and attributes that they have paid for.

3.7 Other considerations

3.7.2 Jurisdictional considerations

With the contractual accounting framework that will need to be established at the retailer level, the jurisdiction of states in the NEM becomes superseded. This does not mean that certain regions may require specific energy security design, and states would still be free to identify the level of overall renewable energy generation, but this would have no meaning in regard to the actual electricity that retailers are selling and customers are buying.

In the case of the ACT, they already have GreenPower electricity PPAs with providers in South Australia, NSW and possibly other states, so it makes no sense to treat the ACT as a different jurisdiction.

If Tasmania remains or segregates itself from the NEM, the state would still continue trading electricity via the Basslink Cable and will therefore be participating in the NEG contractual arrangements.

The NEG should be applied to the Western Australian Grid and the Northern Territory Grid as a separate jurisdiction, and to smaller settlement grids above a threshold. There is no justification for Western Australia and the Northern Territory to avoid the transition to clean and reliable electricity.

Thank you for the opportunity to provide input into the design elements of the National Energy Guarantee.

4 Emissions requirement: Commonwealth Government design elements

PLEASE NOTE: As it was advised in the NEG Consultation Forum that Chapter 4 responses will be provided directly to the Federal Government, questions below have been responded to with a degree of repetition from Section 3

4.2.1 Setting the sectoral emissions reduction target

At a time of rapid technology and market change, the sectoral emissions reduction target is likely to be calculated in error. The market is changing in spite of RET Reviews and the scrapping of the carbon price. The market wants renewable electricity and the transition is achievable at a much faster rate than the Federal Government can imagine.

The emissions target set should be based on the science of climate change, the urgent need to act and what can be planned and achieved ASAP.

4.2.2 Form of the emissions target under the Guarantee

Previous attempts at setting a target, whether an emissions cap, a carbon price or a price cap have always resulted in difficulty. The EU emissions trading scheme was associated with an over allocation of emission permits for many years delaying transition progress. In Australia, there was never an agreement on emissions caps or what emissions intensity caps should be.

The CPRS and Carbon Pricing Mechanisms coupled with the COAG Complementarity Principles also decimated effectiveness of voluntary action for years. The **‘No action carbon neutral logic’** suggested in the 2011 NCOS consultation paper tried to suggest that because there would be a national target on emissions, every organisation would already be carbon neutral. The statement read:

“If we also consider that, under the cap, the net change in aggregate emissions is zero, if all an entity’s emissions were covered by the Scheme it could be considered ‘carbon neutral’ ***in the sense that individual emissions have had no net impact on aggregate emissions***”.

The thinking was hypothetical, ignoring basic greenhouse accounting/any kind of accounting principles and the interaction of policy with people and culture. It federal Department of Climate Change and Energy Efficiency at the time ignored that when everyone plays their part in reducing emissions, it makes conditions easier for governments to set more ambitious targets or caps through time.

Whilst the ‘No Action Carbon Neutral Logic’ was abandoned, the thinking continued in the COAG Complementarity Principles and subsequent Carbon Pricing Mechanism, causing enormous damage to voluntary action and the willingness of Australians to engage in climate mitigation for years.

RESPONSE

The market would have greater certainty if the Federal Government outlined a transition pathway towards 100% renewable energy (or close to) for stationary emissions Under the NEG. Given that the Federal Government is not prepared to plan an energy transition in this way, The NEG approach to establishing retailer obligations also creates the need for contractual accounting and the opportunity for customers to choose either accredited renewable electricity or a retailer that has lower greenhouse gas emissions intensity for the electricity they offer. It is this market choice that is likely to drive the transition to renewable energy faster than the Government can imagine.

4.2.3 Forecasts and adjustments to the target

Questions for stakeholder consultation – Commonwealth Government responsibility

Stakeholder views are sought on:

- Whether, and in what circumstances, electricity emission targets already set should be adjusted.
- The process for making any such adjustments to electricity emissions targets.

RESPONSE

It is assumed that the Federal Government will set an emissions cap that is higher than the market desires and that climate science requires. Under these circumstances, the most important aspect in designing the NEG is to get out of the way of market choice by extending the GHG emissions

accounting framework to end user customers and allowing them to legally buy lower emissions electricity. This means no dodgy reallocation of sale of emission savings by GreenPower customers and those that choose a cleaner retailer, just allow contractual accounting to work and support the contractual choices of customers.

4.2.4 Timing and process for setting the electricity emissions targets under the Guarantee

Questions for stakeholder consultation – Commonwealth Government responsibility

Stakeholder views are sought on the proposed timing for updating the electricity emissions targets, including a five-year notice period.

RESPONSE

Setting the target with a view to achieving a Kyoto 2030 target or a revised Kyoto 2035 target does not create an enduring market signal. The science suggests that the stationary electricity sector must decarbonise faster and the market has shown its appetite to transition to renewable energy faster than the Government can envisage.

Better market certainty would be established by setting the targets against a transition pathway to 100% renewable electricity (or close to 100%).

The further out the government sets targets, the greater potential for error in predicting the transition. It is suggested that the full transition pathway be defined and adjusted in increments along the way using a 3 year rolling update.

4.2.5 Geographic neutrality

The NEG should be applied to any Australian grid above a relatively small threshold.

The NEG should be applied to the physical infrastructure that is the Eastern Australia Grid rather than what is defined as the NEM. This is because Tasmania will continue to trade electricity (and integrated emission values) via the Basslink cable, whether they remain in or are segregated from the NEM.

It is hard to take the heading of this section seriously when Western Australia and the Northern Territory are not included in the scheme. The NEG should be applied to the Western Australian Grid and Northern Territory Grid in separate but parallel schemes with the same rules, and to smaller settlement grids above a given threshold.

There is no justification for Western Australia and Northern Territory to avoid the transition to clean and reliable electricity at an affordable cost.

Climate response and energy security are national issues.

There are some other aspects that require attention.

There cannot be a partial shift to contractual accounting. It would be like a financial and banking system where half of the customers operate within rules, and the other half of customers make up their own rules. In this sense, **geographic neutrality is supported within an identifiable grid system**

The NEG proposal talks about a “deemed emissions level” being established by NEM region, to align with current contracting practices, yet such a proposal is not compatible with simultaneous purchasing of electricity from a different region for that same electricity. For example:

- The Hornsdale wind farm in South Australia is contracted to provide accredited renewable energy to the ACT. At the same time, the NGER framework allocates the emissions from this electricity across all South Australian electricity customers with full

double counting. Under the NEG, it will be necessary to support the contractual arrangement for this renewable electricity to be traded to the ACT retailer. Therefore, it will no longer be appropriate for this electricity to be allocated to customers in South Australia or those in the region in which the Hornsdale wind farm is located.

- All South Australians enjoy lower emissions due to the fact that the investment in renewable energy driven by the Renewable Energy Target has occurred in South Australia at a higher rate. The lower emissions printed on electricity bills and claimed in NGER Scope 2 emissions by reporting corporations has no regard for the fact that the RET liability payments are taken from across Australia, with a much higher proportion of the funding coming from outside South Australia.

Under contractual accounting the location of the generation must cease to be of relevance, and there is a need for a greater focus on tracking the supply contracts to retailers and then to customers

Questions for stakeholder consultation – Commonwealth Government responsibility

Stakeholder views are sought on the proposed approach to setting the electricity emissions targets under the Guarantee and interaction with state renewable energy schemes.

RESPONSE

It is important to understand the difference between **generation claims** and **use claims** by customers. Generation is necessarily spatial, whilst under the proposed NEG, use of electricity types is contractual.

South Australia has enjoyed a high level of renewable energy investment and claims the generation as its achievement, despite the financial contributions being made via the RET from consumers across Australia.

South Australia also claims that all renewables produced in the state are consumed in the state. The ACT Government however contracts for accredited renewable energy from South Australia's Hornsdale wind farm (and has other contracts in other jurisdictions). The Federal Government should support the contractual accounting approach together with full and complete GHG accounting and allocation reforms to stop double claims and clarify the rules for claiming use, as different from generation.

Under the NEG, South Australia's renewable energy use claims would need to be earned, not simply taken for granted. States and territories could set targets for renewable energy generation and investment support and jobs creation, but would only be able to claim **renewable energy use** to the level of MWh of renewables sold within a state to end use customers either as GreenPower or from the proportion of renewables in the retailer pool.

In this way, the ACT could legitimately claim **renewable energy use** whilst its renewable energy generation is small. South Australia could claim a **high level of renewable energy generation** but its government and citizens could not claim a high rate of renewables use unless this was supported by the retailer contracts and customer choices.

4.3 Treatment of EITE activities

Questions for stakeholder consultation – Commonwealth Government responsibility

Stakeholder views are sought on issues to be addressed in exempting EITE activities from the emissions requirement of the Guarantee

RESPONSE

The proposition that EITEs should be fully exempt is based on an assumption that polluting electricity is more expensive than renewable electricity. This assumption is challenged. The ESB should consider that this scheme is of a different nature to the RET which had an inherent structural design flaw of where Large Scale Certificates were separated from the electricity and then traded as a penalty cost to retailers and GreenPower customers.

There is no justification for retaining consistency with the method of exemption under the RET. If the EITEs are exempt they already have exemption through a statement, and do not require yet another certificate scheme to be created as a compliance mechanism under National Electricity Law, when a simple statement under NGER reporting would suffice.

Given that RET certificates will likely drop to junk value these should not be seen as something that would continue in their current role. Under the NEG there is unlikely to be any LGC certificate cost to avoid, and the contracting will better relate to the true cost of generation.

It is also predictable that many EITEI eligible companies may not seek to use the mechanism as they could get better deals that comply with the NEG constraint and with GreenPower reform, some may also choose accredited renewable electricity.

Where an EITEI chooses to purchase more polluting electricity that exceeds the NEG constraint, they would be legally allocated those emissions and also be required to report those higher scope 2 emissions. This should be non-negotiable.

As there is no additional cost for EITEs choosing to buy more polluting electricity they should be prepared to report higher emissions if they choose more polluting electricity.

4.4 External offsets

Questions for stakeholder consultation – Commonwealth Government responsibility

Stakeholder views are sought on whether retailers should be allowed to use external offsets to meet a proportion of their emissions requirement. In particular, views are sought on:

- Whether there is a strong rationale for the use for offsets within the Guarantee
- The impact allowing offsets would have on investment under the Guarantee
- If offsets were to be used to help achieve compliance with the emissions requirement, what would be an appropriate limit for their use?

RESPONSE

The use of carbon offsets is rejected as this will compromise the effectiveness and efficiency of the NEG to transition to clean, reliable and lower cost electricity. Incorporating offsets into an already complex mechanism could make the entire scheme unworkable. The emission values (tonnes CO₂-e Scope2/MWh) would no longer have meaning as the value would change and the measurement units are (tonnes CO₂ Scope 1 sequestered or prevented/ multiple activities such as tree planting) are just not compatible where the objective is to reduce the emissions of electricity generation.

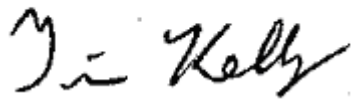
5 Reliability requirement

The Reliability Guarantee mechanism through retailer obligations may not be the best way to assure regional grid reliability. The NEM to date has lacked planning and a process is now required to monitor regions of the grid for vulnerability and take only the action that is necessary to incorporate the right measures in new infrastructure or add reliability components if necessary. Gold plating reliability would not deliver lower prices to customers.

It is reasonable however that pumped storage and battery storage is used in combination with a GreenPower claim, the infrastructure is contracted to accepting only renewable electricity input, before such electricity is sold on to retailers with an adjustment for the efficiency loss of the facility.

I would be grateful of the opportunity to discuss my submission with ASB members in Adelaide in the near future

Yours sincerely,

A handwritten signature in black ink that reads "Tim Kelly". The signature is written in a cursive style with a large initial 'T'.

Tim Kelly