Parliamentary Committees



Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017

Report No. 44, 55th Parliament
Public Works and Utilities Committee
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Public Works and Utilities Committee

Chair	Mr Shane King MP, Member for Kallangur
Deputy Chair	Mr Rob Molhoek MP, Member for Southport
Members	Mr Jason Costigan MP, Member for Whitsunday
	Mr Matt McEachan MP, Member for Redlands
	Ms Joan Pease MP, Member for Lytton
	Mr Chris Whiting MP, Member for Murrumba

Committee Secretariat	+61 7 3553 6633
	pwuc@parliament.qld.gov.au
Technical Scrutiny Secretariat	+61 7 3553 6601
Committee Web Page	www.parliament.qld.gov.au/PWUC

Acknowledgements

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Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
The bill	Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017
CCIQ	Chamber of Commerce and Industry Queensland
c/kWh	Cents per kilowatt-hour
The committee	Public Works and Utilities Committee
DEWS/the department	Department of Energy and Water Supply
Electricity Act	*Electricity Act 1994*
the Rule	Embedded Network Rule
EDO Qld	Environmental Defenders Office, Qld
ENM	Embedded Network Manager
ENO	Embedded Network Operator
EWOQ	Energy and Water Ombudsman Queensland
FLPs	fundamental legislative principles
LSA	*Legislative Standards Act 1992*
the Minister	Minister for Main Roads, Road Safety and Ports and Minister for Energy, Biofuels and Water Supply
NEM	National Electricity Market
NER	National Electricity Rules
NERR	National Energy Retail Rules
PV	photovoltaic
RIS	Regulatory Impact Statement
SBS	Solar Bonus Scheme
TradeCoast	TradeCoast Central Pty Ltd

Chair's foreword

This report presents a summary of the Public Works and Utilities Committee's examination of the Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017.

The committee's task was to consider the policy outcomes to be achieved by the legislation, as well as the application of fundamental legislative principles – that is, to consider whether the bill had sufficient regard to the rights and liberties of individuals, and to the institution of Parliament.

On behalf of the committee, I thank those individuals and organisations who lodged written submissions on the bill. I also thank the committee's secretariat and the Department of Energy and Water Supply.

I commend this report to the House.

Mr Shane King MP

Chair

Recommendation

The committee recommends the Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017 be passed.

1 Introduction

1.1 Role of the committee

The Public Works and Utilities Committee (the committee) is a portfolio committee of the Legislative Assembly which commenced on 27 March 2015 under the *Parliament of Queensland Act 2001* and the Standing Rules and Orders of the Legislative Assembly.[1]

The committee's primary areas of responsibility are:

- main roads, road safety, ports, energy and water supply, and
- housing, public works and sport.

Section 93(1) of the *Parliament of Queensland Act 2001* provides that a portfolio committee is responsible for examining each bill and item of subordinate legislation in its portfolio areas to consider:

- the policy to be given effect by the legislation
- the application of fundamental legislative principles (FLPs), and
- for subordinate legislation – its lawfulness.

On 15 June 2017, the Minister for Main Roads, Road Safety and Ports and Minister for Energy, Biofuels and Water Supply (the Minister) introduced the Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017 (the bill) into the Queensland Parliament. In accordance with Standing Order 131, the bill was referred to the committee for consideration with a report date of 11 August 2017.

1.2 Inquiry process

On 16 June 2017, the committee advised the Department of Energy and Water Supply (DEWS/the department) of the Inquiry process and invited stakeholders and subscribers to provide submissions. The committee received 12 submissions (see Appendix A).

A public departmental briefing was held on 10 July 2017 (see Appendix B for witnesses) and on 14 July 2017 the committee received written advice from DEWS responding to issues raised in submissions and answers to Questions Taken on Notice at the public briefing. The submissions, transcript of the briefing, and departmental advice have been published on the committee's website.

1.3 Policy objectives of the bill

The explanatory notes provide that the purpose of the bill is to amend the *Electricity Act 1994* (Electricity Act) and the *Energy and Water Ombudsman Act 2006* to:

1. clarify when additional generation systems and electricity storage devices can be deployed in association with the Solar Bonus Scheme (SBS) by detailing the specific circumstances in which SBS customers will not be permitted to use additional generation and electricity storage devices, and
2. enable the effective implementation of a new national regulatory framework for retail competition in embedded electricity networks commencing on 1 December 2017 by removing the restriction placed on embedded network customers having to connect to the local distribution network in order to access retail market offers from an authorised retailer and also enabling embedded network customers to access the dispute resolution services of the Energy and Water Ombudsman Queensland (EWOQ).[2]

[1] *Parliament of Queensland Act 2001*, section 88 and Standing Order 194.

[2] Explanatory notes, p 1.

1.4 Commencement of the legislation

Clause 2 of the bill provides that the proposed legislation is to be implemented in two stages:

- the amendments to the Electricity Act, implementing changes to the SBS, will be taken to have come into effect from the date the bill was introduced into Parliament (15 June 2017), and
- the amendments to the Electricity Act and the *Energy and Water Ombudsman Act 2006,* which relate to embedded networks, will commence on 1 December 2017.[3]

1.5 Consultation on the bill

1.5.1 Solar Bonus Scheme - consultation

The explanatory notes advised:

- public consultation on the changes to the SBS was not undertaken 'due to the community sensitivities to the SBS and potential for the costs of the SBS to increase if SBS customers rush to take up new technology in the face of an impending restriction. The Government determined that an increase in SBS costs represented an unacceptable risk which outweighed the need for broad consultation', and
- throughout the development of the proposal in 2016, DEWS consulted confidentially with a number of major stakeholders in the Queensland electricity market, including Energex, Ergon Energy, AGL, Origin Energy and Lumo/Red Energy.[4]

1.5.2 Regulatory arrangements for competition in embedded networks - consultation

The explanatory notes advised the Queensland Government released a discussion paper canvassing the major market and regulatory challenges associated with electricity supply in embedded networks, with a particular focus on addressing consumer protection and introducing competition in the marketplace; DEWS held a targeted stakeholder workshop to explore the impacts of the Embedded Network Rule (the Rule) change proposal; and DEWS subsequently released a further discussion paper to stakeholders to explore the potential impacts, benefits and technical issues associated with introducing retail competition in embedded networks.[5]

In response to a request from the committee, DEWS advised that the following stakeholders were invited to make submissions on the discussion paper *Access to Retailer of Choice for On-supply Customers in Queensland* which was released in 2016:

- WINconnect Pty Ltd
- Shopping Centre Council of Australia
- National Seniors
- Queensland Council of Social Services
- Master Grocers Australia
- Chamber of Commerce and Industry Queensland (CCIQ)
- Strata Communities Australia (Queensland)
- Caravanning Queensland
- Council of the Ageing, and
- Tenants Queensland.[6]

[3] Explanatory notes, p 6.

[4] Explanatory notes, p 5.

[5] Explanatory notes, p 5.

[6] Correspondence dated 27 July 2017.

In November 2015, DEWS released a Consultation Regulatory Impact Statement (RIS) which sought to consider, amongst other things, options to improve small on-supply customer access to the EWOQ.[7]

DEWS advised that in May 2016, the departments sought an exemption from a RIS on the grounds that the Rule had undergone an extensive consultation and impact assessment which is comparable to the requirements of the RIS system, and on 23 June 2016, the Queensland Productivity Commission (Regulatory Review branch) confirmed that the embedded networks proposal was excluded from further assessment.[8]

1.6 Should the bill be passed?

Standing Order 132(1) requires the committee to determine whether or not to recommend the bill be passed.

After examination of the bill, including the policy objectives which it will achieve and consideration of the information provided by the department and from submitters, the committee recommends that the bill be passed.

Recommendation 1

The committee recommends the Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017 be passed.

[7] DEWS, Regulatory Impact Statement, 'On-supply customer access to energy rebates and the Energy and Water Ombudsman Queensland, November 2015.

[8] Correspondence dated 14 July 2017, Attachment 2.

2 Examination of the Electricity and Other Legislation (Batteries and Premium Feed-in Tariff) Amendment Bill 2017

2.1 Solar Bonus Scheme

2.1.1 Background

The explanatory notes advised that the SBS offers eligible small electricity customers a premium feed-in tariff of 44 cents per kilowatt-hour (c/kWh) for surplus electricity generated by eligible solar photovoltaic (PV) systems and exported into the electricity grid; since its introduction in 2008, the SBS has helped over 280,000 Queensland homes and small businesses to install solar PV systems; and it has been instrumental in building the Queensland solar industry.[9]

In the explanatory speech the Minister advised that Queensland has one of the world's highest rates of uptake for small-scale solar power, which is installed in around one in three households:

> *The Solar Bonus Scheme played a pivotal role in driving this solar uptake at an early stage. While the scheme has closed to new customers, we are still seeing strong demand for small-scale solar as renewable technology prices continue to fall and customers look to take greater control over their energy use. We are also seeing rapid growth in the development of complementary technologies such as battery storage. Battery storage has the potential to give customers even more control over their usage and provide other benefits to the network.*
>
> *Queensland government policies which support the transition to a cleaner energy sector, including our commitment to 50 per cent renewables by 2030, one million solar rooftops or 3,000 megawatt commitment, and the actions set out in the Powering Queensland Plan, help add to this demand and development of the clean energy sector.*[10]

DEWS advised the committee that while there is considerable interest from the community about the potential of additional generation and battery technologies, the current SBS rules do not anticipate the availability and affordability of new energy technologies and do not specifically address their use.[11] The explanatory notes stated:

> *This has created ambiguity for customers who may be interested in additional generation or storage, but are reluctant to risk their eligibility for the Solar Bonus Scheme feed-in tariff.*
>
> *It is important that the Government set the right conditions to create opportunities for the installation of new solar PV and batteries without adding to the cost of the Solar Bonus Scheme.*[12]

The explanatory notes advised the bill aims to give certainty to SBS customers about how they can install and operate additional solar PV and/or batteries without affecting their SBS eligibility in order to give SBS customers the necessary confidence to invest in new technology.[13]

2.1.2 Amendments proposed in the bill

The bill proposes to amend section 44A of the Electricity Act to clarify when additional generation systems and electricity storage devices can be deployed in association with the SBS by detailing the specific circumstances in which SBS customers will not be permitted to use additional generation and electricity storage devices.[14]

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[9] Explanatory notes, p 1.

[10] Queensland Parliament, Record of Proceedings, 15 June 2017, pp 1676-1677.

[11] Public briefing transcript, 10 July 2017, p 2.

[12] Explanatory notes, p 1.

[13] Explanatory notes, pp 1-2.

[14] Explanatory notes, p 2.

The proscribed circumstances provided for in section 44A(1A) are described in the explanatory notes:

- under section 44(1A)(a), SBS customers will lose eligibility if they add additional generation capacity (i.e. extra solar panels) to their existing SBS qualifying generator if the total peak combined output of the panels is greater than the rated output of their system's inverter as approved by their distributor
- under section 44A(1A)(b), SBS customers will lose eligibility if they install a battery (or similar) on the same electrical installation as their qualifying generator, and the battery is installed in a way that allows it to supply electricity to the electrical installation at the same time as the qualifying generator, or export electricity to the grid, and
- under section 4A(1A)(c), SBS customers will lose eligibility if they install an additional generator, such as additional solar PV system, a wind turbine, a liquid fuel generator (e.g. diesel) on the same electricity installation as their qualifying generator, and the additional generator is installed in a way that allows it to supply electricity to the electrical installation at the same time as the qualifying generator, or export electricity to the grid.[15]

And the explanatory notes clarified:

This means that customers may:

- *install an additional generator which only supplies the home or business at night, or during a blackout, and remain eligible for the Solar Bonus Scheme;*
- *install a battery which only supplies the home or business at night, or during a blackout, and remain eligible for the Solar Bonus Scheme;*
- *install an additional generator which supplies a separate structure which is not connected to the part of the home or business which is also supplied by the qualifying generator (e.g. a shed).*[16]

Proposed section 44A(1B) provides that if a customer breaches any of the conditions in section 44A(1A), then the distributor is no longer obliged to pay the customer the SBS feed-in tariff of 44c/kWh.[17]

Clause 5(4) of the bill proposes to insert new subsection (6) which includes three new definitions for subsection 44A(1A) – 'approved total rated inverter capacity', 'electricity storage device' and 'supply interruption'.

Retrospectivity

Clause 2 of the bill provides that the amendments to the Electricity Act implementing changes to the SBS will be taken to have come into effect from the date the bill was introduced into Parliament.

Clause 6 of the bill proposes to insert a new part 18 (Transitional provisions) into chapter 14 of the Electricity Act which explains through proposed new section 360 the application of revised section 44A. Section 360 (1) explains that the new provisions in in subsections 44A(1A), 44A(1B) and 44A(6) will apply to all customers who are eligible to receive the SBS, regardless of when their qualifying generator was installed. The explanatory notes advised that this means that the new provisions will apply to SBS customers who installed, or received approval to install, their qualifying generator before 8 June 2011 to whom section 328 applies, as well as customers who installed their qualifying generator before 30 June 2013.[18]

[15] Explanatory notes, pp 7-8.

[16] Explanatory notes, p 8.

[17] Explanatory notes, p 8.

[18] Explanatory notes, p 9.

The Minister advised in the explanatory speech that the decision to retrospectively apply these provisions was not made lightly 'however, this is necessary to minimise opportunities for customers to unfairly profit from ambiguity in the law while the bill is considered. Transitional provisions will preserve the rights of those who have invested or contracted to invest in equipment under the legislation in place at the time of introduction.'[19]

Exemptions

Proposed section 360(2) contains an exemption from section 44A(1A)(a) for SBS customers who had oversized their qualifying generator before the commencement of the bill.

Proposed section 360(3) contains an exemption from section 44A(1A)(b) for SBS customers who had already installed or contracted with a supplier to install a battery in a way that would otherwise be prohibited by section 44A(1A)(b) before the commencement of the bill.

Proposed section 360(4) contains an exemption from section 44A(1A)(c) for SBS customers who had already installed or contracted with a supplier to install an additional generator in a way that would otherwise be prohibited by proposed section 44A before the commencement of the bill.

2.1.3 Stakeholder views and department advice

Support for the proposed SBS amendments

A number of submissions supported the intention of the amendments to prevent households on the SBS increasing their grid exports beyond the level made possible by their original SBS-qualifying solar PV system or other generator.[20] For example, the submission from Solar Citizens supported the intention of the bill on the basis that the circumstances proscribed in the bill 'would go beyond the original intent of the SBS and impose unreasonable costs on the State'.[21]

Degradation of solar panels

However, Solar Citizens and a number of other stakeholders raised a concern that the proposed legislation will have a number of additional consequences for SBS households, including prohibiting SBS customers from installing additional generation and electricity storage devices to overcome loss of generation due to degradation of their solar panels.[22]

In response, the department clarified that customers who are experiencing degradation of panels may replace components on a like-for-like basis and remain eligible for the SBS.[23]

Additional generation capacity and storage devices

A number of submitters supported SBS customers being able to install energy storage to maximise self-use of solar output (from their qualifying generator), to participate in a virtual battery arrangement, or as part of demand response.[24] For example Mr Sheehan submitted:

> *Using energy storage in this way will **reduce** exports from the qualifying generator and hence, the State's SBS liability, and bring many other benefits to the entire electricity market.*
>
> *Such usage is **not** contrary to "the intent" of the SBS and should be encouraged by Government policy. For now, such usage may be a decision based on personal values and I or strategic thinking rather than hard-headed economics.*

[19] Queensland Parliament, Record of Proceedings, 15 June 2017, p 1677.

[20] See submission Solar Citizens, submission 7; EDO Qld submission 8

[21] Submission 7, p 1.

[22] Green Energy Technologies, submission 1; A C and K J Kerr, submission 2; Mr Sheehan, submission 5; and CCIQ, submission 12, p 1.

[23] Correspondence dated 14 July 2017, Attachment 1, p 1.

[24] See Mr J Sheehan, submission 5; Solar Citizens, submission 7; and EDO Qld, submission 8, p 2.

> *It is easy to detect those SBS consumers who use energy storage in a manner contrary to "the intent" of the SBS. There will be a spike in solar export meter readings that will be obvious to the Distributor who can then investigate and act.Distributors already use this method to detect SBS consumers that take unfair advantage of the SBS.*[25]

In response, the department advised that the bill does not limit customers' ability to expand an existing system, install an additional system, or use a battery to power their home or business:

> *Customers may do all of these things, but if they do so beyond what is permitted under the proposed provisions, they will become ineligible to receive the Solar Bonus Scheme.*
>
> *If a customer determines there is more value in operating a second system or battery outside of what is allowed then the customer will forfeit their 44c/kWh feed-in tariff.*
>
> *Some customers may wish to use energy generated by a qualifying generator and stored in a battery during the day rather than importing from the grid. However, limitations with existing metering configurations make it difficult to distinguish this operation of a battery from those customers who charge their batteries from the grid and supply their homes or businesses from the battery during the day to enable maximum exports from their qualifying generator. This operation takes advantage of the difference between the Solar Bonus Scheme feed-in tariff (44c/kWh) and the price of electricity imported from the grid (around 27 c/kWh). To enable daytime use and ensure compliance with Solar Bonus Scheme rules, separate time-based metering would be required, adding cost to the customer.*[26]

DEWS also reiterated that the bill contains an exemption for those customers who oversized their qualifying generator before 15 June 2017. The department referred to the situation provided in submission 2 and advised 'Mr Kerr would be exempt from the operation of the new provisions, as his qualifying generator was oversized prior to 15 June 2017'.[27]

In relation to 'virtual batteries' DEWS advised:

- this is a commercial product negotiated between a retailer, distributor, or third party and a customer with a battery to enable a retailer or distributor to access the stored energy in the battery for an agreed payment
- the product would require that the quantity of electricity exported from the battery be separately measured to enable the calculation of payments and to support this, additional metering would be needed, as well as further calculation by the distributor to subtract the quantity of electricity exported from the separately metered battery from the total quantity of electricity exported from the customer's qualifying generator, and
- the product has significant potential to support the electricity market and the network, however, it would likely add additional costs to SBS administration in particular due to the technical limitations of existing metering and the administrative complexity for distributor and retailer billing systems.[28]

[25] Mr Sheehan, submission 5, p 2.

[26] Correspondence dated 14 July 2017, Attachment 1, pp 2-3.

[27] Correspondence dated 14 July 2017, Attachment 1, p 2.

[28] Correspondence dated 14 July 2017, Attachment 1, p 3.

The department also advised:

> *The proposed changes do not preclude 'virtual batteries' within the State more broadly. Solar Bonus Scheme customers comprise less than 10 per cent of Queensland electricity customers, and another 215,000 customers currently have solar PV systems. There remains significant market opportunity for this product even if it is not available to Solar Bonus Scheme customers.*[29]

Cap proposed by some stakeholders as an alternative approach

A number of submissions proposed the implementation of a cap on SBS customers' exports as an alternative approach.[30] For example, the Environmental Defenders Office Qld (EDO Qld) recommended a cap on the level of energy exported to the grid that is eligible to receive the SBS payment so that SBS participants are only paid for the amount they export, as this would not limit the solar generations and storage options for SBS customers. While the EDO Qld recognised that there would be administrative burdens involved with determining a fair cap for each SBS participant it recommended that the true costs and benefits of this option be further investigated.[31]

DEWS responded that the cap option would present administrative complexity and implementation costs for distributors and retailers and these costs would ultimately be passed on to customers.[32]

Inverter capacity

The Green Energy Technologies submission proposed that customers should be able to add generation capacity to their qualifying generator which exceeds the Clean Energy Council installation guidelines for the output of their system's inverter.[33]

In response, the department advised that prior to the connection of a customer's qualifying generator to the supply network, the local electricity distributor approved the inverter capacity for that customer and that the bill:

> *….. allows the customer to add panels up to the capacity of that inverter but seeks to prevent a customer adding extra generation capacity which exceeds the output of the inverter, which is known as 'oversizing'. Oversizing enables the generator to operate for a longer period at its technical peak, generating more kilowatt-hours than a system where the panels match the inverter size. For most customers, most of this additional generation would be surplus and would be exported. This is not consistent with the intent of the Solar Bonus Scheme.*[34]

TradeCoast Central Pty Ltd (TradeCoast) pointed out that the proposed amendments depart from the Queensland Productivity Commission's Recommendation No. 19 of the Electricity Pricing Inquiry which recommended excluding existing SBS participants who install a storage device and raised the following concerns that the amendments proposed in the bill:

- may conversely increase costs associated with the SBS by enabling SBS customers to install batteries given operational compliance with the requirements of the proposed legislation 'will likely be very difficult', and
- allows existing eligible SBS customers to increase the number of solar panels installed, over and above the original installation and remain eligible for the 44c Feed in Tariff which conflicts with non SBS customers whom are ineligible to receive the 44c Feed in Tariff.[35]

[29] Correspondence dated 14 July 2017, Attachment 1, p 3.

[30] See Mr Sheehan, submission 5, p 4; Solar Citizens, submission 7, p 2; and EDO Qld, submission 8, p 2.

[31] Submission 8, p 2.

[32] Correspondence dated 14 July 2017, Attachment 1, p 3.

[33] Submission 1, p 1, p 3.

[34] Correspondence dated 14 July 2017, Attachment 1, p 1.

[35] Submission 9, p 2.

In response to the issues raised by TradeCoast Central, DEWS advised that in November 2016, the Queensland Government stated its commitment to retain the SBS until its legislated end date of 30 June 2028 and undertook to 'consider how to accommodate the uptake of new technology such as battery storage alongside the SBS'.[36] The department further advised:

> *Battery trials are underway throughout Australia and offer significant potential to support the electricity market and the network. The proposed Bill still allows Solar Bonus Scheme customers to power their house at night with a battery which also has the potential to deliver support for the market and network. It will be up to relevant companies to develop offers for customers and demonstrate what value could be available compared to existing entitlements already being received. If there is sufficient value for a Solar Bonus Scheme customer to utilise their system in a way not permitted then they can forego their Solar Bonus Scheme payments in exchange for this alternative offering.*[37]

Cessation date for the Scheme

While the CCIQ supported the bill's purpose in limiting expenditure on the SBS, it was opposed to the continuation of the SBS on the basis it contributes to almost 10% of a small business bill:

> *The scheme is holistically inequitable as many small businesses and vulnerable consumers were not and are not in a position to benefit from the program, therefore the benefits for the few are borne by the many.*
>
> *Significant costs have been incurred by distributors in complying with the Queensland Government's Solar Bonus Scheme (SBS). Solar feed-in tariffs under the SBS will continue to be a major cost for small business customers as costs are passed along.*[38]

The CCIQ recommended the SBS cessation date be brought forward to earlier than 2028.

In response, DEWS advised:

- the Queensland Government has committed to retain the SBS until its legislated end date of 30 June 2028
- the Government has directed Energy Queensland to remove the cost of the SBS from electricity bills over the next three years, and
- the bill is intended to limit potential increases in SBS costs in light of reducing equipment prices.[39]

2.2 Regulatory arrangements for competition in embedded networks

2.2.1 Background

In September 2014, the Queensland Parliament agreed to apply the National Energy Retail Law in Queensland when it passed the National Energy Retail Law (Queensland) Bill 2014. The *Electricity - National Scheme (Queensland) Act 1997* governs Queensland's participation in the National Electricity Market (NEM) by applying the National Electricity Law in Queensland. This Act also applies the National Electricity Rules (NER) to the NEM in Queensland. These rules have the force of law, and are made under the National Electricity Law.

[36] Correspondence dated 14 July 2017, Attachment 1, pp 3-4.

[37] Correspondence dated 14 July 2017, Attachment 1, p 4.

[38] Submission 12, p 1.

[39] Correspondence dated 14 July 2017, Attachment 1, p 4.

DEWS advised the committee:

- while full retail contestability commenced for the majority of Queenslanders in 2007, access to competition for embedded network customers was deferred until a nationally consistent framework was established, and
- the new national framework for embedded networks has since been formed following the recommendations in the Australian Energy Market Commission's (AEMC) Power of Choice review.[40]

On 17 Dec 2015, the AEMC made a new NER, known as the Embedded Networks Rule 2015. The new Rule aims to reduce the barriers to on-supply (embedded network) customers accessing offers from electricity retailers.[41] The rule change followed a request proposed by the Australian Energy Market Operator (AEMO) stemming from recommendations in the 2012 AEMC's Power of Choice review.[42]

The explanatory notes advised that 'the Queensland Government committed to providing competition to customers within embedded networks when a nationally consistent approach for embedded networks was developed and incorporated into the NER.[43] The new Rule is due to come into effect on 1 December 2017.[44]

Embedded networks are private electricity networks which serve multiple premises and are located within, and connected to, a distribution or transmission system through a parent connection point in the NEM (for example, shopping centres, retirement villages, caravan parks, apartment blocks and office buildings).[45]

Within an embedded network, the embedded network operator (ENO) (for example, a shopping centre owner), also known as an 'on-supplier', provides embedded network customers (also known as 'receivers') with network services. Many ENOs also sell electricity to embedded network customers (for example, a business leasing space in a shopping centre).[46]

DEWS advised that the new Rule framework will allow embedded network customers to choose an alternative electricity supplier, while remaining part of the embedded network:

> *This framework works to facilitate direct market interaction for on-supply customers, much in the same way as direct customers of a retailer currently interact with the market, however the difference is that on-supply customers will remain connected to their embedded network and gain the ability to choose the retail service component of their electricity supply, including authorised electricity retailers.*[47]

An AEMC factsheet advised that the Rule change proposes the following benefits for embedded network customers who will be able to:

- choose the price and price structure of their electricity service that suits them best, which may result in lower bills
- choose from a wider variety of products and services, and
- gain easier access to government schemes and consumer protections.[48]

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[40] Public briefing transcript, 10 Jul 2017, 2.

[41] DEWS, correspondence dated 14 July 2017, Attachment 3, p 1.

[42] AEMC factsheet, New rules for embedded networks, accessed 5 July 2017.

[43] Explanatory notes, p 2.

[44] Explanatory notes, p 1.

[45] AEMC factsheet, New rules for embedded networks, accessed 5 July 2017.

[46] AEMC factsheet, New rules for embedded networks, accessed 5 July 2017.

[47] DEWS, correspondence dated 14 July 2017, Attachment 3, p 1.

[48] AEMC factsheet, New rules for embedded networks, accessed 5 July 2017.

In the explanatory speech, the Minister advised:

> *With the increasing popularity of embedded networks in recent years, it is important that customers within these networks have the ability to choose the price and price structure of the electricity service that suits them best and are able to easily access government schemes and consumer protections.*
>
> *The new rule does not prevent embedded network operators from continuing to sell electricity to embedded network customers; however, it will provide them with a greater incentive to compete with retailers.*[49]

While amendments to the NER come into force without the need for any Queensland-specific legislative amendment, the explanatory notes advised the amendments to Queensland legislation are required in order to remove barriers that prevent competition for embedded network customers and avoid any conflict with the implementation of this major national reform in Queensland.[50]

The explanatory notes advised:

> *The amendment of existing legislation will mean that Queensland will be consistent with the NER, which have the force of law in this jurisdiction. Victoria, NSW, South Australia and the Australian Capital Territory have regulatory frameworks that allow for embedded network customers to access retail market offers. However, upon commencement of the Embedded Network Rule on 1 December 2017, these jurisdictions will transition to the new framework as the NER also have the force of law in these jurisdictions.*[51]

2.2.2 Amendments proposed in the bill

As outlined above, the amendments proposed in part 2 (clauses 4 and 7) and part 3 of the bill will align Queensland with the changes to the NER to clarify the regulatory arrangements for embedded network customers accessing retail market offers that will come into effect on 1 December 2017.[52]

Clauses 4 and 7 of the bill propose amendments to the Electricity Act to remove the legislative restriction [section 23(2)] placed on 'receivers' having to connect to the local distribution network in order to access retail market offers from an authorised retailer.

The explanatory notes advised that section 23(2) of the Electricity Act:

> *.. restricts the circumstances in which a receiver will be considered a customer for the purposes of the Electricity Act. Omission of this restriction is needed to ensure consistency with the National Energy Retail Law (Queensland) and to remove the barrier that prevents embedded network customers from cost effectively purchasing electricity from a chosen retailer.*[53]

Part 3 of the bill proposes to amend the *Energy and Water Ombudsman Act 2006* to enable embedded network customers who choose a retailer to access EWOQ's dispute resolution services, as other retail customers can.[54]

[49] Queensland Parliament, Record of Proceedings, 15 June 2017, p 1677.

[50] Explanatory notes, p 2.

[51] Explanatory notes, p 6.

[52] Explanatory notes, p 6.

[53] Explanatory notes, p 7.

[54] Explanatory notes, p 3.

2.2.3 Stakeholders views and department responses

Support for the Rule change and the proposed amendments

The submission from Powerlink Queensland indicated support for the alignment of Queensland legislation with the NER changes relating to embedded networks.[55]

ERM Power also advised of its strong support for the change to the National Rule on the basis:

> *The current arrangements disadvantage small customers within embedded networks by limiting their access to retail competition. Without choice of supplier, these customers may be enduring higher electricity rates, lower service quality, and poor access to other energy-related services, compared to those connected directly to the distribution network.*
>
> *The proposed changes are an important step towards lifting this restriction to enable choice for these customers.*[56]

The Shopping Centre Council of Australia submitted that it had no opposition to the proposed amendments in the bill and advised it had been part of an extensive consultation process undertaken by the AEMC, AEMO and by the Queensland Government (DEWS).[57]

The CCIQ supported the amendments on the basis it will bring Queensland into harmony with other jurisdictions, uphold the AEMC rule change and clarifying ambiguity and stated 'CCIQ welcomes the bill's purpose to reward small businesses with the power of choice, greater retail competition and consumer protections'.[58]

Compliance costs

The department advised the committee that under the new Rule:

- ENOs who sell electricity to 30 or more customers will be required to appoint an Embedded Network Manager (ENM) by 1 December 2017 to perform the functions needed to link embedded network customers to the wider market, and
- for those ENOs who sell electricity to less than 30 customers, an ENM is only required to be appointed when a customer contracts with a retailer of their choice and the cooling off period has expired – this is known as an 'ENM trigger event'.[59]

DEWS advised that if a customer chooses to go to an alternative supplier, the ENO will need to liaise with the retailer to make sure there is an ENM allocated to that individual customer which will allow them to be charged and billed form the market retailer.[60]

While the Property Council of Australia submission supported the National Energy Customer Framework on the basis it provides consistency and efficiency in the operation of on-selling schemes across all jurisdictions, it raised an issue in relation to the recovery of the cost of the ENM:

> *Owners will need to appoint an ENM for each network, and absorb the cost of this service. This will place a significant new administrative and cost burden upon them, and as such, the Property Council remains concerned about the equity of this outcome.*
>
> *The requirement for these costs to be borne by the embedded network owner without any opportunity to recover their costs, is not only articulated in the new national guideline, but also within Queensland's Manufactured Home (Residential Parks) Act 2003, which precludes*

[55] Submission 10, p 1.

[56] Submission 3, pp 1-2.

[57] Submission 6, p 1.

[58] Submission 12, p 2.

[59] Correspondence dated 14 July 2017, Attachment 3 – Answer to Question taken on Notice, p 2.

[60] Public briefing transcript, 10 July 2017, p 6.

> *manufactured home park owners who on-supply electricity from having the ability to charge any fees to cover their costs.*[61]

The submission from TradeCoast also raised a concern about the 'unknown costs' associated with engaging an ENM.[62]

The department responded to this concern by advising that the AEMC designed the new framework to limit compliance costs and administrative burden for ENOs and that the AEMC expects a wide variety of choice of ENM suppliers, including an option for ENOs to perform the ENM functions themselves provided they meet the relevant requirements.[63]

In response to a question on notice taken at the public briefing DEWS reiterated:

> *Under the AEMC framework, most ENOs will be required to absorb the costs of appointment and provision of ENM services. This will be a new cost for ENOs which has not been quantified by the AEMC. However, the new framework has been designed to ensure that compliance costs and the administrative burden are minimised for ENOs by providing an open market for the provision of embedded network management services. Any party that meets the Australian Energy Market Operator's (AEMO) accreditation requirements to provide embedded network management services may participate. This is aimed at providing ENOs with a wide choice of suppliers of these services, including the option of performing the functions themselves.*[64]

TradeCoast also raised a number of concerns about the cost of technical requirements if the amendments are passed:

> *To this end if the Bill is passed in its current form, Queensland ENOs will be required to undertake significant technical changes to their networks in order to ensure their networks are compliant with technical and operational requirements which apply to embedded networks in FRC* [full retail competition] *jurisdictions.*
>
> *These will involve significant switchboard modifications to enable additional retail meters to be installed.*[65]

In response, the department advised that since 1 January 2012, ENO's have been required to install NEM compliant sub-metering within their own private networks and:

> *As TradeCoast Central Industrial Park has been established since 2008, the requirement for the ENO to install NEM compliant metering does not apply. Therefore, any customer within the TradeCoast Central Industrial Park wishing to access a retailer of their choice is likely to require an upgrade to their meter. Any costs associated with installation of a NEM compliant meter is a decision between the customer and their retailer.*[66]

DEWS provided further advice to the committee that if an ENO has installed a non-compliant electricity sub-meter for a customer in their network after January 2012, then they will be liable for the costs to install a NEM meter.[67]

[61] Submission 4, pp 1-2.

[62] Submission 11, p 8.

[63] Correspondence dated 14 July 2017, Attachment 2, p 1.

[64] Correspondence dated 14 July 2017, Attachment 3 – Answer to Question taken on Notice, p 2.

[65] Submission 11, p 7.

[66] Correspondence dated 14 July 2017, Attachment 2, pp 1-2.

[67] Correspondence dated 14 July 2017, Attachment 3 – Answer to Question taken on Notice, p 2.

The submission from the Shopping Council of Australia supported the proposed amendments, so long as they do not impose additional costs, outside the national rules, for embedded network owners. The submission stated 'our interpretation is that the amendments will not impose such costs, and the Department has confirmed our interpretation of the bill'.[68]

Implementation timeframes and consultation

The Shopping Centre Council of Australia advised that it had been involved in embedded network policy in Queensland, and nationally, over numerous years and thanked DEWS for their 'courtesy and professionalism' in discussions regarding this bill.[69]

TradeCoast raised a concern that the proposed amendment to the Electricity Act had only recently been introduced and that the new Rule implementation date is 1 December 2017:

> *To this end, in order to ensure compliance by 1 December 2017, ENOs will have less than four months to implement the significant technical changes, prepare for the financial changes discussed above and to comply with the Rule Change.*[70]

The department provided the following response:

> *The establishment of the Embedded Networks Rule follows extensive consultation under the Rule making process conducted by the AEMC. This process commenced with the release of a consultation paper on 21 May 2015, and a further consultation paper in the form of a Draft Rule on 10 September 2015. Both of these processes invited stakeholders to make written submissions in response to the issues raised.*
>
> *During this time, stakeholders have had the opportunity to be involved in the AEMC consultation process and have known since 17 December 2015 of the commencement date (1 December 2017) of the new framework.*[71]

The submission from TradeCoast also raised a concern that 'the Queensland Government seems to have failed to sufficiently consult with ENOs, or consider the impacts on ENOs of the proposed changes under the bill'.[72] DEWS responded:

> *The substantial element of consultation for this reform has been conducted by the AEMC through formal consultation with many stakeholders over a period of almost three years to inform the Embedded Networks Rule.*
>
> *In addition and in May 2016, the Department sought exemption from a Regulatory Impact Statement (RIS) on the grounds that the Embedded Networks Rule had undergone an extensive consultation and impact assessment which is comparable to the requirements of the RIS system. On 23 June 2016, the Department received advice from the Queensland Productivity Commission (Regulatory Review branch) that the embedded networks proposal was excluded from further assessment.* [73]

[68] Submission 6, p 1.

[69] Submission 6, p 1.

[70] Submission 11, p 9.

[71] Correspondence dated 14 July 2017, Attachment 2, p 2.

[72] Submission 11, p 9.

[73] Correspondence dated 14 July 2017, Attachment 2, p 2.

Additional embedded network regulatory reviews

The AEMC is currently undertaking a broader review to identify and assess any issues for embedded network customers under the National Energy Retail Law and the National Energy Retail Rules (NERR) with the terms of reference being provided to the Council of Australian Governments Energy Council in December 2016. The AEMC advised the reason for the review is to address other issues that were raised during consultation on the Embedded Rule change:

> *A number of substantial retail market issues were raised during the AEMC's work on the rule change. Due to the limited scope of the rule change request, the Commission did not have the power to make changes to the NERR. The Commission also considered that further analysis and consultation was required on the retail issues raised by embedded networks, including potential NERL changes.*[74]

The TradeCoast submission recommended that the proposed amendments be delayed until the AEMC review is finalised.[75] The department responded that while the AEMC is currently reviewing regulatory arrangements for embedded networks more broadly, and this process is on-going, any outcomes are outside the scope of the bill.[76]

Amendments to the *Energy and Water Ombudsman Act 2006*

Submitters generally supported the proposed amendment to the *Energy and Water Ombudsman Act 2006*.[77] The Shopping Centre Council of Australia noted the proposed amendments only relates to 'on-market' customers in embedded networks, as opposed to embedded network customers:

> *We understand that access to the Ombudsman Scheme will only be in relation to an on-market customer's supplier issues, and not any embedded network issues, and subsequently, that no cost will be imposed on embedded network owners (e.g. via direct or indirect membership of the Ombudsman Scheme), and further, that embedded network owners will not be bound by any Ombudsman decision. The Departments has confirmed our understanding of these provisions of the Bill.*[78]

The Shopping Centre Council of Australia submission also welcomed the Government's consideration of access to Ombudsman schemes for embedded networks as part the national approach to this issue, including a current review being undertaken by the Australian Energy regulator and the Australia and New Zealand Energy and Water Ombudsman Network. [79]

ERM Power considered it appropriate that embedded network customers have access to the EWOQ dispute resolution services given that small distribution-connected customers have access to the service.[80] The CCIQ submission also supported the amendments to the *Energy and Water Ombudsman Act 2006.*[81]

[74] AEMC factsheet, Review of regulatory arrangements for embedded networks, accessed 13 July 2017.

[75] Submission 11, pp 10-11.

[76] Correspondence dated 14 July 2017, Attachment 2, p 2.

[77] See submissions 3 and 12.

[78] Submission 6, p 1.

[79] Submission 6, p 1.

[80] Submission 3, p 2.

[81] Submission 12, p 2.

2.2.4 Further issues considered by the committee

At the public briefing, the committee requested advice from DEWS about the potential costs for embedded network customers who do not already have a separate meter installed. The department advised that potentially the customer may be responsible for some metering costs, if they agreed to this as a separate infrastructure charge from the retailer:

> *In terms of cost, there would be a consideration of the current metering requirements just to make sure they would be compliant. For anything before 2012, there might need to be a meter upgrade in choosing to do that. Otherwise, the national rule change takes into account the physical situations that may exist in a range of various scenarios—from a manufactured homes park to a body corporate situation. There are various different metering arrangements depending on when they are installed. In terms of potential cost to the customer, there could be a metering consideration but the retailer would also be likely to take into account the existing infrastructure. If it were suitable, or compatible, it is unlikely that there would be any requirements for that customer to transfer over. In any case, any metering changes in the embedded network itself could not be passed on to that customer. The retailer would be able to provide that customer with any information in terms of upgrades that would be required in the same way that a direct customer can negotiate at the moment around metering.*[82]

In response to a question taken on notice at the briefing, DEWS provided further advice that while, for the majority of on-supply customers, accessing retail competition is unlikely to result in any significant financial impacts, on-supply customers who choose to purchase electricity from a retailer may need to upgrade their electricity sub-meter and these costs are likely to either be borne by the electricity retailer or agreed between the customer and their retailer. [83]

> *For example, if a resident within a Manufactured Home Park that was built prior to 2012 accepted an offer from an electricity retailer, it is likely that the current sub-meter will need to be upgraded by the resident in order to be compliant with NEM requirements. As mentioned, any cost for the new meter is likely to be borne by the retailer or agreed between the customer and their retailer. If the Manufactured Home Park was built post 2012, then NEM compliant sub-metering is expected to be in place and therefore no metering upgrade will be required by the resident.*
>
> *As a further example, residents located in an apartment complex or tenants in a shopping centre may incur other costs in addition to a potential meter upgrade. For example, there may be limited space availability in some situations where meter switchboards may not be capable of housing a National Electricity Market (NEM) meter.*
>
> *On-supply customers will need to weigh the financial and other benefits of accessing a competitive market offer against any cost they may incur.*[84]

[82] Public briefing transcript, 10 July 2017, p 5.

[83] Correspondence dated 14 July 2017, Attachment 3 – Answer to Question taken on Notice, p 2.

[84] Correspondence dated 14 July 2017, Attachment 3 – Answer to Question taken on Notice, p 2.

3 Compliance with the *Legislative Standards Act 1992*

3.1 Fundamental legislative principles

Section 4 of the *Legislative Standards Act 1992* (LSA) states that FLPs are the 'principles relating to legislation that underlie a parliamentary democracy based on the rule of law'. The principles include that legislation has sufficient regard to:

- the rights and liberties of individuals, and
- the institution of Parliament.

The committee has examined the application of the fundamental legislative principles to the Bill. The committee brings the following to the attention of the House.

3.1.1 Rights and liberties of individuals

Section 4(2)(a) of the LSA requires that legislation has sufficient regard to the rights and liberties of individuals.

Clause 5

Clause 5 proposes to amend section 44A (Additional condition to allow credit for electricity produced by small photovoltaic generators) of the Electricity Act.

Section 44A currently provides that should a customer be eligible, they will receive a payment for excess electricity generated and exported to the network, otherwise known as the SBS. The scheme offers a feed-in tariff of 44 cents per kilowatt-hour (c/kWh) for all surplus electricity generated by eligible solar PV systems and exported into the electricity grid.

Clause 5(3) proposes to insert new section 44A(1A) into the Electricity Act. Section 44A(1A) provides that a customer stops being entitled to receive the SBS 44 c/kWh feed-in tariff from their distributor if:

(a) the maximum output of the component of the customer's qualifying generator that generates electricity exceeds, in aggregate, the approved total rated inverter capacity of the generator; or
(b) the customer installs an electricity storage device as part of the electrical installation supplied by the customer's qualifying generator in a way that enables the device to supply electricity to
    (i) the electrical installation at the same time as the qualifying generator, other than during a supply interruption; or
    (ii) the distribution entity's supply network; or

(c) the customer installs 1 or more generators (each an additional generator) as part of the electrical installation supplied by the customer's qualifying generator in a way that enables the additional generator to supply electricity to:
    (i) the electrical installation at the same time as the qualifying generator, other than during a supply interruption; or
    (ii) the distribution entity's supply network.

Clause 6 proposes to insert transitional provisions by way of new section 360 which sets out the application of section 44A(1A). Section 360(2) provides an exemption in relation to a qualifying customer who has oversized a qualifying generator before commencement. Similarly, sections 360(2) and 360(3) provide exemptions for qualifying customers who have installed an electricity storage device or additional generator, or have entered into a contract to install these items, before commencement.

Potential FLP issues

Section 44A(1A) provides that a customer's total peak combined output generated by their panels or another device cannot be greater than the rated output of their systems inverter, as approved by their distributor. Should this occur they will lose eligibility to receive the SBS premium feed-in tariff payment.

In restricting the ability of customers to increase their electricity generation, section 44A(1A) potentially breaches section 4(2)(a) of the LSA, which provides that a bill should have sufficient regard to the rights and liberties of individuals.

The explanatory notes acknowledged the potential breach and provide the following justification:

> *Clause 5 of the Bill proposes restricting Solar Bonus Scheme customers from: 'oversizing' their Solar Bonus Scheme qualifying generators, or installing additional generators and/or electricity storage devices in a way that could boost the premium feed in tariff payments they receive under the Solar Bonus Scheme. Should a customer undertake one of these activities, they will lose eligibility to receive the Solar Bonus Scheme premium feed-in tariff payment. This may potentially breach the principle that legislation has sufficient regard to rights and liberties of individuals.*
>
> *At present, the Solar Bonus Scheme rules do not anticipate the availability and affordability of these technologies and do not address their use. While customers undertaking these activities are generally not eligible for premium feed-in tariff payments in relation to energy generated from a secondary generation system or electricity storage device, they will not necessarily lose eligibility for scheme payments in relation to legitimate exports from their qualifying generator. However, given technical limitations it is in practice very difficult to determine whether an exported electron has come from a Solar Bonus Scheme qualifying generator, or an additional generator/storage device, particularly if these are operating concurrently. Ambiguity around this creates uncertainty for distribution businesses who are liable for payment, and customers trying to comply with the rules. In addressing this ambiguity and setting clear boundaries for what is not permissible, the clause gives sufficient regard to the rights of individuals.*[85]

Committee consideration

The committee noted the restrictions that section 44A(1A) will place on SBS customers in limiting the power they may export to the electricity grid and noted the consequences if their capacity exceeds their approved output. However, the committee also noted:

- the section does not limit the ability of customers to install and use additional solar panels or batteries to meet their electricity consumption needs or replace panels which degrade over time
- if customers do not exceed their current capacity they will still receive their 44 c/kWh feed-in tariff from their distributor, and
- the provisions provide a safeguard to qualifying customers by providing an exemption to those who have made an oversizing modification or have installed an electricity storage device or additional generator, before commencement.

Clause 2

Clause 2(1) provides that amendments to the Electricity Act implementing changes to the SBS will be taken to have come into effect from the date the Bill was introduced into Parliament. These are the amendments in Part 2 of the bill, other than sections 4 and 7.

Pursuant to clause 2(2), the amendments to the Electricity Act and the *Energy and Water Ombudsman Act 2006* as provided by section 4 and 7, and part 3, will commence on 1 December 2017.

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85 Explanatory notes, pp 4-5.

Potential FLP issues

In allowing the amendments pursuant to Part 2 to come into effect from the date the bill was introduced, clause 2(1) operates retrospectively. This potentially breaches section 4(3)(g) of the LSA which provides that legislation should not adversely affect rights and liberties, or impose obligations retrospectively. Strong argument is required to justify an adverse effect on rights and liberties, or imposition of obligations, retrospectively.

The explanatory notes acknowledged the potential FLP breach and provide the following justification for the clause:

> *The proposed changes to the Solar Bonus Scheme may adversely affect, in some cases, the rights of certain individuals, being Solar Bonus Scheme customers who may have been considering whether to:*
>
> - *'oversize' their Solar Bonus Scheme qualifying generator, or*
> - *install additional generators and/or electricity storage devices in a way that could boost the premium feed in tariff payments they receive under the Solar Bonus Scheme.*
>
> *To minimise the potential impact on those customers, the Minister for Energy, Biofuels and Water Supply has publicly announced the proposal on the date of introduction. The Bill also protects Solar Bonus Scheme customers who have already installed, or have entered into contracts to purchase, additional generation capacity or batteries, prior to the date of the announcement.*
>
> *This approach reduces the potential negative impacts from retrospective legislation on individual rights by preserving the rights of individuals who have made investments, or have contracted to invest, in equipment under the legislation in place at the time of introduction, while minimising the opportunities for customers to unfairly profit from ambiguity in the legislation.*[86]

Committee consideration

The committee noted the justification provided in the explanatory notes regarding the retrospective operation of the provisions and also noted that the legislation seeks to safeguard and provide certainty to those individuals who have entered into agreements or made investments pursuant to the legislation in place at the time the bill was introduced.

3.2 Explanatory notes

Part 4 of the LSA requires an explanatory note be circulated when a bill is introduced into the Legislative Assembly, and sets out the information an explanatory note should contain.

Explanatory notes were tabled with the introduction of the bill. The committee considers the notes are fairly detailed and contain the information required by Part 4 and a reasonable level of background information and commentary to facilitate understanding of the bill's aims and origins.

[86] Explanatory notes, p 4.

Appendix A – List of submissions

Sub #	Submitter
001	Green Energy Technologies
002	A C and K J Kerr
003	ERM Power
004	Property Council of Australia
005	Mr J Sheehan
006	Shopping Centre Council of Australia
007	Solar Citizens
008	Environmental Defenders Office Qld
009	TradeCoast Central Pty Ltd *(relating to the Solar Bonus Scheme)*
010	Powerlink Queensland
011	TradeCoast Central Pty Ltd *(relating to the Embedded Network Rule)*
012	Chamber of Commerce and Industry Queensland

Appendix B – List of witnesses at public departmental briefing

Department of Energy and Water Supply

- Ms Kristen Findlay, Manager, Consumer Policy, Embedded Network
- Ms Gayle Leaver, General Manager, Energy Industry Policy, Solar Bonus Scheme
- Mr Tim Quirey, Director, Strategic Futures, Solar Bonus Scheme
- Ms Ty Taylor, Director, Energy Consumer and Pricing, Embedded Network
- Mr Peter Wall, Principal Adviser, Strategic Futures, Solar Bonus Scheme