2015-2016 RETAILER FEED-IN TARIFF

Draft Price Determination
Statement of Reasons

October 2014

REQUEST FOR SUBMISSIONS

The Essential Services Commission (**the Commission**) invites written submissions from all members of the community on the matters raised in this Draft Report. Written comments should be provided by **Thursday 30 October 2014**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is Commission's policy to make all submissions publicly available via its website (www.escosa.sa.gov.au), except where a submission either wholly or partly contains confidential or commercially sensitive information provided on a confidential basis and appropriate prior notice has been given.

The Commission may also exercise its discretion not to publish any submission based on length or content (for example, containing material that is defamatory, offensive or in breach of any law).

Responses to this paper should be directed to:

2015-2016 Retailer Feed-in Tariff - Draft Price Determination
Statement of Reasons

Essential Services Commission of South Australia
GPO Box 2605
Adelaide SA 5001

Telephone: (08) 8463 4444
Freecall: 1800 633 592 (SA and mobiles only)
E-mail: escosa@escosa.sa.gov.au
Website: www.escosa.sa.gov.au

Contact Officer: Con Carellas

TABLE OF CONTENTS

GLOSSARY OF TERMS

AAC	ACIL Allen Consulting, an independent expert appointed by the Commission to advise on the fair and reasonable value of PV electricity to electricity retailers
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CO_2-e	Carbon dioxide equivalent
Commission	Essential Services Commission of South Australia
D-FiT	The mandatory FiT of 44 cents/kWh or 16 cents/kWh for each kWh of electricity fed into the distribution network payable by SA Power Networks to PV customers (based on the date of connection or connection approval of their PV units) under Division 3AB of the Electricity Act
Electricity Act	Electricity Act 1996
ESC Act	Essential Services Commission Act 2002
FiT	Feed-in Tariff
IPART	Independent Pricing and Regulatory Tribunal (New South Wales)
kWh	kilo Watt hour, which is the equivalent of 1,000 Wh, an amount of energy approximately equivalent to running a single bar radiator for one hour
MWh	Mega Watt hour, which is the equivalent of 1,000 kWh
NECF	National Energy Customer Framework
NEM	National Electricity Market
NSLP	Net System Load Profile

PV customer	A residential or small business customer using less than 160 MWh of electricity per annum at a connection point which has a PV unit and complies with the requirements of Division 3AB of the Electricity Act
PV unit	A PV customer's photo-voltaic electricity generating unit which has a maximum nameplate capacity of 10kVA (single phase) or 30kVA (at three phases), meets the requirements of Australian Standard AS 4777, is connected to the distribution network in a manner allowing the export of electricity and has appropriate metering arrangements in place
R-FiT	The minimum FiT amount as determined by the Commission payable for each kWh of electricity fed into the distribution network by electricity retailers to PV customers under Division 3AB of the Electricity Act
RRN	Regional Reference Node, which is the reference point (or designated reference node) for setting a region's spot price. The current RRN for South Australia is the Torrens Island Power Station 66kV bus.
QCA	Queensland Competition Authority
Watt	A derived SI (International System of units) unit of power, defined as one joule per second
Wh	One watt hour, a unit of energy

EXECUTIVE SUMMARY

- ***Under the Electricity Act 1996, the Commission may make price determinations from time to time setting the value of the Retailer Feed-in Tariff (R-FiT). The R-FiT is paid by electricity retailers to customers with rooftop solar panels, for the solar energy that is fed into the electricity network.***
- ***The value of the R-FiT can, and does, vary over time, to take account of factors such as changes in the wholesale cost of electricity. The R-FiT is not fixed in the long-term.***
- ***The Commission is proposing a reduction in the minimum R-FiT from 6.0 cents per kWh to 5.3 cents per kWh from 1 January 2015, reflecting a reduction in the forecast wholesale cost of electricity to retailers.***
- ***There has not been sufficient evidence to conclude that effective competition for customers with solar panels exists, such that deregulation of the R-FiT would be in the long-term interests of consumers.***
- ***Therefore, the Commission intends to continue to regulate the R-FiT for a further two-year period (adjusted if necessary on 1 January 2016), and will review the need for continued regulation prior to the expiration of that period.***

The Essential Services Commission of South Australia (**Commission**) is an independent economic regulator of the water, electricity, gas, ports and rail industries in South Australia. The Commission's primary objective is the ***protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services***.

One of the Commission's functions in the electricity industry is to regularly determine the *minimum* price which electricity retailers must, under the provisions of the *Electricity Act 1996* (**Electricity Act**), pay to residential and small business electricity customers (**PV customers**) whose solar photovoltaic generators (**PV units**) feed electricity into the distribution network - the Retailer Feed-In Tariff or **R-FiT**.

The R-FiT recognises that there is an economic value to electricity retailers for any electricity which is fed into the distribution network, albeit that it may vary over time, and provides a means by which PV customers may realise that economic value through the receipt of payments from electricity retailers. The R-FiT can and does change over time.

In December 2013, the Commission made a price determination that set the *minimum* R-FiT to apply during 2014. That determination established a minimum value of 7.6 cents/kWh from 1 January 2014, which reduced to 6.0 cents/kWh from the date of removal of the carbon price (1 July 2014). the amount of 6.0 cents/kWh will apply until 31 December 2014.

The Commission is now considering whether or not to continue to regulate the R-FiT from 1 January 2015 and, if so, what the minimum value should be.

This Draft Price Determination

This report sets out, for public comment, the Commission's reasons in respect of its Draft Price Determination to make a two-year R-FiT price determination under the Electricity Act and the ESC Act to commence from 1 January 2015:

- setting a *minimum* R-FiT value of 5.3 cents/kWh from 1 January 2015 to 31 December 2015, which is the lower bound of the reasonable range of estimated values to an electricity retailer of electricity fed into the distribution network (the 90th percentile and 10th percentile values, which forms the reasonable range, is 5.3 and 7.4 cents/kWh respectively)
- providing a mechanism that would allow the *minimum* R-FiT value to be adjusted from 1 January 2016 (based on a pre-determined methodology) in order to ensure the value itself continues to remain reflective of wholesale electricity cost movements
- implementing a formal price-monitoring regime in respect of electricity retailers' R-FiT offerings, with a view to further reviewing its regulatory approach for the *minimum* R-FiT prior to 2017.

Why make a draft determination?

The primary reason for making a minimum R-FiT price determination for another two years is that no new evidence has come to light since the Commission's 2013 review of the R-FiT to suggest that deregulation of the R-FiT is in the long-term interests of energy consumers. Information about the extent to which retailers are actively competing for PV customers remains inconclusive in the following areas:

- ***Switching rates*** – Data provided by SA Power Networks/AEMO; and electricity retailers both show that the switching rates for PV and non-PV customers are highly correlated, but that the switching rate for PV customers is substantially lower.

  Although the low switching rate for PV customers raises some doubts about the level of competition for those customers, it could also be due to the fact that PV customers that export energy will generally have lower bills than non-PV customers and, therefore, have less to gain from switching between market offers.
- ***Incidence of Market Offers to PV customers*** – PV customers continue to have limited access to the range of products offered by electricity retailers in South Australia. As at the end of July 2014, only nine of the sixteen electricity retailers were making their best-priced Market Offers available to PV customers. Origin Energy and Simply Energy were the only major electricity retailers to do so.
- ***Incidence of minimum payments*** – by 30 July 2014, nine of the 13 electricity retailers selling to PV customers were paying the minimum R-FiT of 7.6 cents/kWh, which was reduced from 9.8 cents/kWh from 1 January 2014.

However, it is important to note that not all of those nine retailers reduced their R-FiTs with immediate effect from 1 January 2014. This may suggest that tacit coordination in respect to the setting of R-FiTs among retailers does not exist in the electricity retail market.

- ***Incidence of higher R-FiT payments*** – by 30 July 2014, four of the 13 retailers selling to PV customers were making R-FiT payments above the minimum value, with AGL SA being the only major electricity retailer to do so. The R-FiT payments offered by those four retailers were either 8.0 cents/kWh or 9.8 cents/kWh.

  However, analysis carried out by the Commission shows that the higher R-FiTs offered by three of the retailers appear to be subsidised by higher electricity usage prices to those same customers. This may suggest that regulation of the R-FiT is not having a material impact on PV customers, to the extent that retailers may use higher market offers to subsidise higher R-FiT amounts, and that higher R-FiT payments do not necessarily provide the best overall deal for PV customers.

- ***Evidence arising from other jurisdictions*** – two of the three largest electricity retailers in New South Wales (AGL and EnergyAustralia) are currently offering voluntary R-FiT payments towards the higher end of the Independent Pricing and Regulatory Tribunal's recommended non-binding benchmark range of the value of fed-in PV electricity 4.9 to 9.3 cents/kWh. The other retailer, Origin Energy, is making a voluntary R-FiT payment at the lower end of the benchmark range.

  However, in Victoria the same three electricity retailers are currently paying the minimum R-FiTs (as determined by the Essential Services Commission) despite having the flexibility to pay higher amounts.

  AGL SA, EnergyAustralia and Origin Energy are the three largest electricity retailers in South Australia.

In light of these uncertainties, the Commission considers that it is appropriate to continue regulating the *minimum* R-FiT for a further two years. This will provide the Commission with more time to collect evidence about the potential costs and benefits to PV customers and energy customers more generally of deregulating the R-FiT.

However, the Commission accepts, in principle, that regulators setting prices is a second-best outcome if markets are sufficiently competitive. It has, therefore, set the *minimum* R-FiT at a lower bound estimate of a reasonable range to provide sufficient headroom for electricity retailers to compete above that floor and thus for the market to determine the efficient price.

Why has the proposed R-FiT value changed from the current level?

It is important to note that the proposed *minimum* R-FiT value of 5.3 cents/kWh to apply from 1 January 2015 is less than the current R-FiT of 6.0 cents/kWh, as electricity wholesale cost forecasts have declined. This is based primarily on the expectation that electricity

demand will continue to fall in 2015. Accordingly, there is a corresponding decline in the estimated value to retailers of PV customers' exports in 2015.

This will have minimal impact on most PV customers; those with an average consumption profile of 5,000 kWh annually and larger-sized PV systems may see a reduction in R-FiT revenue of around $8 annually. The greatest benefit to PV customers continues to be reduced energy imports from the distribution network and the associated avoided retail electricity costs.

The Commission believes that it is in the long-term interests of all energy customers to set an R-FiT that does not exceed the wholesale electricity costs avoided by retailers. If the Commission were to set a *minimum* R-FiT value higher than the true value of the electricity fed-in to the grid, then electricity retailers could seek to recover any revenue shortfall by increasing their electricity consumption tariffs to all customers and/or by avoiding retailing to PV customers. Electricity customers are worse off in both instances.

What happens after 2015?

The Draft Price Determination proposes a mechanism that would allow the R-FiT value to be adjusted on 1 January 2016 (based on the methodology set out in this Draft Price Determination) to ensure the value continues to remain reflective of wholesale electricity cost movements. The adjusted minimum value would be determined by the Commission by November 2015, to allow retailers sufficient time to implement any changes to their R-FiT values by 1 January 2016.

Further, it proposes the continuation of a formal price-monitoring regime under the ESC Act, to monitor the extent to which competitive forces are driving electricity retailers to provide R-FiTs in excess of the *minimum* value determined by the Commission. Based, in part, on the Commission's findings through the price-monitoring regime, it will reconsider its regulatory position, based upon the long term interests of consumers, through a subsequent review process in mid-2016. As competition ought to be a dynamic process, the Commission would expect to see R-FiT offerings that reflect value to electricity retailers while, at the same time, not seeing any diminution in PV customers' ability to access competitive electricity retail prices relative to those available to non-PV customers.

Next steps

The Commission encourages interested parties to provide written submissions to this Draft Price Determination. The Commission will consider all submissions in reaching a final decision on this matter by December 2014.

1. INTRODUCTION

The Essential Services Commission of South Australia (**Commission**) is an independent economic regulator of the water, electricity, gas, ports and rail industries in South Australia. The Commission's primary objective is the ***protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services***.

One of the Commission's functions in the electricity industry is determining the *minimum* price which electricity retailers must, under the provisions of the *Electricity Act 1996* (**Electricity Act**) pay to residential and small business electricity customers (**PV customers**) whose solar photovoltaic generators (**PV units**) feed electricity into the distribution network (the retailer feed-in tariff or **R-FiT**).

The R-FiT recognises that there is an economic value for any electricity which is fed into the distribution network, and provides a means by which PV customers may realise that economic value through the receipt of payments from electricity retailers. The value of the R-FiT can vary for time to time, to take account of factors such as changes in the wholesale cost of electricity. The R-FiT is not a long-term final price.

Any price determination of the *minimum* R-FiT is made under the terms of the Commission's establishing Act, the *Essential Services Commission Act 2002* (**ESC Act**), as authorised by and consistent with the terms of the Electricity Act.

1.1 The feed-in scheme: D-FiT and R-FiT

The South Australian FiT arrangements are established under the Electricity Act[1] and have two elements: the R-FiT and the Distribution FiT (D-FiT).

Under the FiT scheme, South Australian PV customers who consume less than 160MWh of electricity annually at a single connection point and have qualifying PV units installed at their premises may receive FiT payments in respect of each kWh of electricity exported into the distribution network.

Customers may choose to install PV units for various reasons; environmental concerns, the potential for financial returns or to reduce the amount they pay to electricity retailers for the electricity consumption at their premises. The generation output of a PV unit is a substitute for the need to purchase electricity from an electricity retailer. If the PV units generate more electricity than a customer requires, the excess electricity is exported to the distribution network.

To be a *qualifying* PV unit for FiT purposes, a PV customer's PV unit must:

- have a maximum nameplate capacity of 10kVA (single phase) or 30kVA (three phase) and meet any other requirements of Australian Standard AS 4777

[1] Refer generally, Electricity Act 1996, Division 3AB; a copy of that Act may be accessed from the South Australian Legislation website at http://www.legislation.sa.gov.au/LZ/C/A/ELECTRICITY%20ACT%201996.aspx.

- be connected to SA Power Networks' distribution network in a manner allowing the export of electricity, and
- have appropriate metering arrangements in place.

Of note, the FiT scheme does not apply in any distribution network serving fewer than 10,000 customers, which effectively limits its scope to customers who are directly connected to the network operated by SA Power Networks.

The Australian Energy Market Operator (**AEMO**) noted in its August 2013 *South Australian Electricity Report* that:[2]

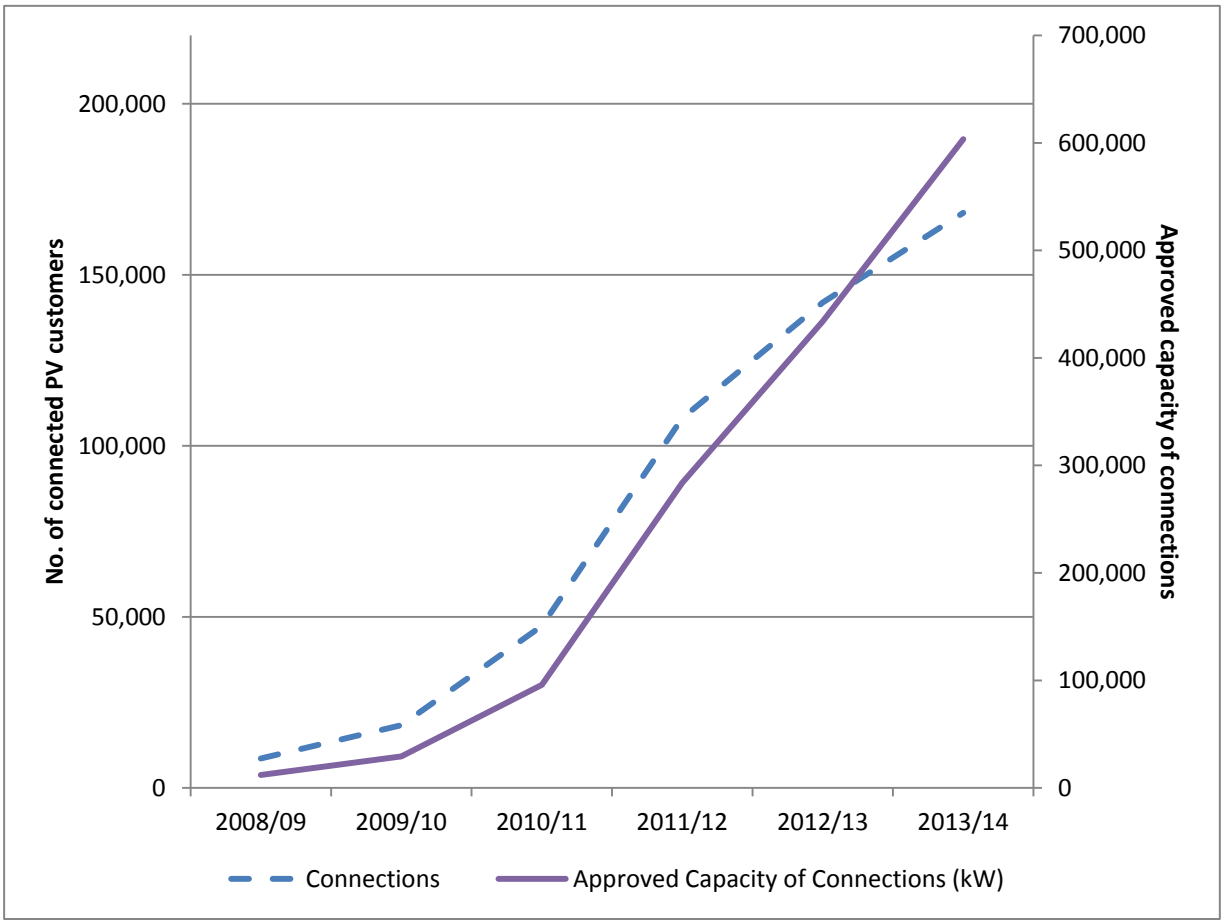
> *Rooftop PV in South Australia has grown strongly since 2009, and rooftop PV penetration is higher compared with other NEM regions. This is primarily due to government incentives in the form of rebates and feed-in tariffs, the Small-scale Technology Certificate (STC) multiplier, falling system costs and rising electricity prices. These factors help reduce the payback period, making PV an attractive option for households, particularly from 2010 to 2012.*
>
> *Growth has slowed in recent years, partially due to reduced feed-in tariff rates. Moderate growth is expected to continue over the outlook period due to continued increases in energy prices and decreasing costs of imported solar panels which will allow the payback period to remain the same (5 to 7 years) despite a reduction in the feed-in tariff.*

As at 30 June 2014, data provided by SA Power Networks shows that there were 168,122 PV customers in South Australia (approximately one-in-five South Australian residential and small business customers), with the aggregate approved PV unit capacity of around 603 MW.

As set out in Figure 1-1 below, and consistent with AEMO's observations, SA Power Networks' data confirms that there has been a consistent upwards trend in both the number and installed capacity of PV units in this State since the commencement of the FiT scheme.

[2] Australian Energy Market Operator, *2013 South Australian Electricity Report*, August 2013, page 2-7; available at http://www.aemo.com.au/Electricity/Planning/South-Australian-Advisory-Functions/South-Australian-Electricity-Report.

Figure 1-1: SA Power Networks' PV installation data 2008-09 to 2013-14



Source: SA Power Networks

The average capacity of PV units has increased at a greater rate than the increase in the total number of PV units installed. Between June 2009 and June 2014, the average size of PV units in South Australia has increased from 1.3 kW to 2.9 kW.

Under the FiT scheme, each kWh exported (nt each kWh generated) entitles a PV customer to FiT payments, subject to various limitations and qualifications set out in the Electricity Act. The payments related to exported kWh of electricity are sometimes referred to as "credits" as they are, in the first instance, set off against any amounts payable for electricity consumed by the PV customer and, if in excess of those amounts, thereafter accrue to the credit of the PV customer.

1.1.1 The D-FiT

The D-FiT scheme is set out in section 36AE of the Electricity Act and commenced on 1 July 2008. The Commission has no regulatory role in relation to the D-FiT; however, to provide background and context, the key elements of the D-FiT arrangements are set out below.

Background to the D-FiT

The D-FiT scheme was originally identified in the South Australian State Strategic Plan as a Government policy intention to introduce a "feed-in law" to reward households that install PV generation units by paying them for the electricity fed back into the electricity grid as part of its broader strategy to tackle climate change.[3]

At the time of introducing the feed-in scheme in 2008, the South Australian Government stated that its proposed feed-in scheme aimed to fill the gaps left by declining Commonwealth Government support for residential PV generation units and allow the South Australian Government to pursue its objective of leadership in solar power.[4]

The proposed scheme was a means of promoting decentralised renewable energy generation by providing a specific bonus for owners of small-scale grid-connected PV generation units. PV customers[5] would receive 44 cents/kWh, (or roughly double the price at that time of the electricity standing contract), for all electricity returned to the grid after supplying the household's own consumption needs at any point in time. The 44 cents/kWh scheme was closed to new PV customers on 1 October 2011 and was replaced with a 16 cent/kWh D-FiT, which was available to new PV customers up to 30 September 2013. Table 1-1 below summarises the D-FiT scheme.

Table 1-1: D-FiT payment and term by PV unit class

PV UNIT INSTALLATION/ APPROVAL DATE	D-FIT CREDITS	DURATION OF D-FIT
Class 1 Before 1 October 2011	44 cents/kWh	Until 30 June 2028
Class 2 1 October 2011 to 30 September 2013	16 cents /kWh	Until 30 September 2016
Class 3 From 1 October 2013	0.0 cents /kWh	N/A

[3] "Objective 3: Attaining Sustainability" outlined a number of key initiatives to achieve that goal. The introduction of a feed-in scheme sits within the broader Target T3.5 which states: "*Greenhouse gas emissions reduction (existing – modified): achieve the Kyoto target by limiting the State's greenhouse gas emissions to 108% of 1990 levels during 2008-2012, as a first step towards reducing emissions by 60% (to 40% of 1990 levels) by 2050*" and Target T3.12 which stated: "*Support the development of renewable energy so that it comprises 20% of the State's electricity production and consumption by 2014*". Refer http://saplan.org.au/.

[4] Government of South Australia, *South Australia's Feed-in Mechanism for Residential Small-Scale Solar Photovoltaic Installations*, Discussion Paper, February 2007.

[5] While the feed-in scheme was originally proposed to apply only to residential customers, the scheme was extended to all "small customers" (that is, those customers consuming less than 160MWh of electricity annually) during the Bill's passage through the Parliament.

Qualification for the D-FiT

Eligibility for the D-FiT is subject to the following agreed conditions[6]:

- D-FiT credits are limited to the first 45 kWh/day of electricity exported into the distribution network
- D-FiT credits are limited to one PV unit per PV customer, and
- PV units are excluded from the scheme if they are operated primarily for the purpose of generating a profit from receiving the D-FiT credit (with SA Power Networks being responsible for determination of this matter).

Closure of the D-FiT to new PV customers

Since 30 September 2013, new PV customers are no longer entitled to receive D-FiT payments – the D-FiT scheme is now closed to new entrants.

The decision to close the scheme was consistent with the original intention of the Government when the scheme was introduced. As noted in the report prepared for the South Australian Government in 2010 by Consulting Partners, *South Australian Feed-in Tariff Review – Final Report*:[7]

> *During the Second Reading Speech for the Bill the Government committed to undertaking a review of the solar feed-in scheme after 2.5 years or when a total of 10 megawatts (MW) of small grid connected solar electricity systems were installed in South Australia. Data from the Federal Department of Climate Change indicated that 10MW of installed capacity was reached around May 2009.*

In 2011, when introducing into Parliament the Government's proposed Bill to give effect to the closure of the D-FiT, the Minister for Energy noted that there was already approximately 50MW of installed PV unit capacity in South Australia. The Minister went on to state that:[8]

> *To strike the right balance between the availability of the scheme and the overall cost to all electricity customers, the government proposed to close the scheme to new entrants when an installed capacity of 60 MW is reached. I advise honourable members that customer uptake of the feed-in scheme has been strong since the Premier's announcement.*
>
> *In order to provide an adequate implementation period, the government proposes to close the scheme to new entrants from 1 October 2011.*

---

6 The SA Government's solar feed-in scheme website (available at: http://www.sa.gov.au/topics/water-energy-and-environment/energy/energy-supply-and-sources/renewable-energy-sources/solar-energy/solar-photovoltaic-systems/solar-feed-in-scheme) has a comprehensive discussion of the various eligibility requirements and conditions.

7 Consulting Partners, *South Australian Feed-in Tariff Review – Final Report*, 2010, page 6.

8 House of Assembly Hansard, House of Assembly - Wednesday, 6 April 2011, Page 3238, Minister for Energy, the Hon. M. O'Brien M.P.; available at www.parliament.sa.gov.au.

D-FiT funding arrangements

While paid by SA Power Networks to PV customers, the costs of the D-FiT payments are borne by all South Australian electricity customers through their electricity network charges.

Based on SA Power Network's 2014-15 electricity network prices,[9] the impact of the D-FiT on a typical average annual residential electricity customers bill is around $118 (exclusive of GST), or approximately 6 per cent.[10]

1.1.2 The R-FiT

The R-FiT scheme is set out in section 36AD of the Electricity Act and commenced in January 2012.

The R-FiT, which is currently set at 6.0 cents/kWh, must be paid by electricity retailers to PV customers at or above the *minimum* value (if any) set by the Commission from time to time.

Background to the R-FiT

Prior to the commencement of the D-FiT scheme in 2008, only three of the eleven electricity retailers operating in South Australia (AGL, TRUenergy (now EnergyAustralia) and Origin Energy) were making voluntary FiT payments to customers. The combined market share of those retailers at that time was 87.4%; with AGL holding 63%, Origin Energy 16% and TRUenergy (now EnergyAustralia) 8.4%.[11]

Following commencement of the D-FiT, those electricity retailers significantly reduced the amount of those voluntary FiT offerings, as shown in the following table.

Table 1-2: Electricity retailer voluntary FiT payments prior to and post D-FiT commencement

ELECTRICITY RETAILER	PRIOR TO D-FIT (2008)	POST D-FIT
AGL	One-for-one (based on retail consumption tariff)	July 2008 – Oct. 2009: 0 cents/kWh From 1 Nov. 2009: 8 cents/kWh
TRUenergy	18 cents/kWh	July 2008 – Aug. 2009: 18 cents/kWh From Aug. 2009: 6 cents/kWh
Origin Energy	20 cents/kWh	6 cents/kWh

[9] SA Power Networks, *Network Tariff and Negotiated Services – Tariffs 1 July 2014*, June 2014; available at http://www.sapowernetworks.com.au/centric/industry/our_network/network_tariffs.jsp.

[10] Based on an estimated annual electricity bill of $1,844 for a typical residential customer consuming 5,000 kWh per annum (excluding off-peak and green energy). Estimated bill figure is based on a simple average of available residential Standing Offers offered by all electricity retailers at 30 June 2013.

[11] Essential Services Commission, *Annual Performance Reports – Time Series Data*; available at http://www.escosa.sa.gov.au/electricity-overview/reporting-and-compliance/annual-performance-reports.aspx.

This led to community concerns that electricity retailers, in reducing or removing their voluntary FiT payments, could make windfall financial gains. Those gains could arise as a result of the PV electricity fed into the distribution system reducing the amount of electricity required to be purchased from the National Electricity Market (**NEM**) and, hence, electricity retailers' costs. In that sense, the fed-in PV electricity has value and the central concern was that electricity retailers may have been retaining that value at the cost of those producing the PV electricity.

In the second-reading speech for the Bill which ultimately gave effect to the R-FiT regime, the then Minister for Energy noted that:[12]

> *The government's proposal will oblige retailers, who choose to contract with solar customers, to pay **at least a minimum retail rate**, which would be determined by ESCOSA, for the power received from solar panels. The retailer payment will apply to power exported by all small-scale solar photovoltaic generators, regardless of whether or not the power exported is also eligible for the premium feed-in tariff.*
>
> *The mandated minimum retailer payment will continue to apply beyond the feed-in scheme's expiry in 2028 to ensure that **retailers pay customers for the value they receive from power exported to the grid**. This minimum rate will not be subject to the new eligibility criteria of the daily cap, and the exclusion of multiple and dedicated generators.*
>
> (emphasis added)

The R-FiT came into effect from January 2012. The amendments to the Electricity Act which gave effect to the R-FiT provided, consistent with the Government's policy intentions, that the Commission was required to make an initial price determination under the ESC Act at that time, to set an R-FiT value.

The requirement under the Electricity Act to make a price determination only applied to the initial price determination. The Commission has a discretion as to whether or not to make any subsequent R-FiT price determinations; however, if the Commission chooses to do so, it is required to take into account a set of statutory factors (as explained in Chapter 2) in reaching its decision.

Two important matters arise in respect of the R-FiT as established under the Electricity Act.

First, any value determined by the Commission is intended to be only a *minimum* amount paid by electricity retailers. Second, the value may vary over time (as determined by the Commission), reflecting matters such as changing market conditions.

[12] House of Assembly Hansard, Wednesday 6 April 2011, page 3238; available at: http://hansard.parliament.sa.gov.au/docloader/House%20of%20Assembly/2011_04_06/Daily/House%20of%20Assembly_C_Daily_DIST_2011_04_06_v20.pdf.

These are important considerations, along with other statutory factors set out in the Electricity and ESC Acts, which inform the Commission when making an R-FiT price determination.

A further consideration is that, under the Electricity Act, the Commission *may* make such an R-FiT determination: for example, when it considers doing so best protects the long-term interests of South Australian electricity consumers - which is the Commission's primary statutory objective under the ESC Act; however, it is not *required* to do so.

If the Commission forms the view, having regard to all relevant statutory factors, that it would not be in South Australian electricity consumers' long-term interests for it to make an R-FiT price determination, then it will not do so.

Qualification for the R-FiT

To qualify for an R-FiT, a PV customer has to install a *qualifying* PV unit (as described in section 1.1 above). Unlike the D-FiT scheme, there is no time by which a qualifying PV unit must be installed and no time restriction on the payment of R-FiTs – the R-FiT scheme continues in perpetuity (albeit that there is the potential for the Commission to not set an R-FiT value) or until repealed by the Parliament.

The purpose of the R-FiT is to recognise that there is economic value for any electricity which is fed into the distribution network, albeit that value may vary over time. The Electricity Act requires electricity retailers to recognise that economic value through payments to PV customers.

Payments under the R-FiT

The current *minimum* value of the R-FiT is 6.0 cents/kWh, set by the Commission under a price determination made in December 2013.

That price determination established a minimum R-FiT value of 7.6 cents/kWh which applied from 1 January 2014, but provided a mechanism to vary that value to 6.0 cents/kWh in the event that the Clean Energy Act 2011 was repealed or the carbon price under that Act was set to zero. The reason the carbon price affected the R-FiT value is that the wholesale cost of electricity was set at a price inclusive of the carbon price. As the principle benefit of PV exports to retailers is avoided energy purchases from the wholesale electricity market, that market price, which included a carbon component, formed the basis of the value of the R-FiT.

The Parliament of Australia has since repealed the Clean Energy Act 2011, abolishing the carbon price, effective from 1 July 2014. As the carbon price component of that minimum R-FiT payment amount no longer applies, the *minimum* R-FiT value of 6.0 cents/kWh took effect from 1 July 2014.

The *minimum* R-FiT does not mean that electricity retailers are required to set the R-FiT at 6.0 cents/kWh – retailers can, and are encouraged to, offer payments above that amount.

1.1.3 Summary of amounts payable to PV customers under the FiT arrangements

Overall, the FiT scheme comprises two elements – the D-FiT and the *minimum* R-FiT (currently 6.0 cents/kWh). The Electricity Act determines a small customer's entitlement to D-FiT and R-FiT payments and the period for which he or she will receive one or both of those payments based on the time at which the relevant PV unit was connected, or approved for connection, to the network, as follows:

Table 1-3: Amount and period of FiT payments (as at August 2014) (nominal cents/kWh and GST exclusive)

PV UNIT INSTALLATION/ APPROVAL DATE	CREDIT AMOUNT	PERIOD PAYABLE
Category 1 qualifying customer (before 1 October 2011)	6.0 cents/kWh R-FiT + 44 cents/kWh D-FiT	Ongoing (rate will vary over time) + Until 30 June 2028
Category 2 qualifying customer (1 October 2011 to 30 September 2013)	6.0 cents/kWh R-FiT + 16 cents/kWh D-FiT	Ongoing (rate will vary over time) + Until 30 September 2016
Other customers (From 1 October 2013)	6.0 cents/kWh R-FiT	Ongoing (rate will vary over time)

2. LEGISLATIVE FRAMEWORK

Both the decision to make and the making of an R-FiT price determination occur within a statutory framework. This Chapter provides an overview of the legislative regime within which the Commission works and the specific provisions which relate to R-FiT price determinations.

2.1 The Commission

The Commission is a statutory authority, established under the ESC Act as a general regulator of essential services in South Australia, including the essential service of electricity supply.

Section 5 of the Act provides the Commission with a set of statutory functions.

> ***5—Functions***
>
> *The Commission has the following functions:*
>
> *(a) to regulate prices and perform licensing and other functions under relevant industry regulation Acts;*
>
> *(b) to monitor and enforce compliance with and promote improvement in standards and conditions of service and supply under relevant industry regulation Acts;*
>
> *(c) to make, monitor the operation of, and review from time to time, codes and rules relating to the conduct or operations of a regulated industry or regulated entities;*
>
> *(d) to provide and require consumer consultation processes in regulated industries and to assist consumers and others with information and other services;*
>
> *(e) to advise the Minister on matters relating to the economic regulation of regulated industries, including reliability issues and service standards;*
>
> *(f) to advise the Minister on any matter referred by the Minister;*
>
> *(g) to administer this Act;*
>
> *(h) to perform functions assigned to the Commission under this or any other Act;*
>
> *(i) in appropriate cases, to prosecute offences against this Act or a relevant industry regulation Act.*

In the performance of those functions, the Commission is required to meet the statutory objectives set out at section 6 of the ESC Act, which includes a paramount statutory objective:

6—Objectives

In performing the Commission's functions, the Commission must—

(a) have as its primary objective protection of the long term interests of South Australian consumers with respect to the price, quality and reliability of essential services; and

(b) at the same time, have regard to the need to—

(i) promote competitive and fair market conduct; and

(ii) prevent misuse of monopoly or market power; and

(iii) facilitate entry into relevant markets; and

(iv) promote economic efficiency; and

(v) ensure consumers benefit from competition and efficiency; and

(vi) facilitate maintenance of the financial viability of regulated industries and the incentive for long term investment; and

(vii) promote consistency in regulation with other jurisdictions.

Together, these sections set out the broad scope of the Commission's role and a framework for its performance of that role. As can been seen from the provisions of section 5(a), the ESC Act expressly contemplates that other Acts, such as the Electricity Act in the case of setting R-FiT amounts, will at times call up the Commission's powers and functions.

2.2 R-FiT provisions of the Electricity Act

In section 1.1.2 above, the Commission examined the scope and purpose of the R-FiT; this section focuses on the detailed statutory arrangements for the R-FiT.

2.2.1 The R-FiT obligation and amount

The requirement for electricity retailers to pay the minimum R-FiT arises from section 36AD(1) of the Electricity Act:[13]

> *It is a condition of the licence of the electricity entity that has the relevant contract to sell electricity as a retailer to a qualifying customer who feeds electricity generated by a qualifying generator into a distribution network,*

[13] Section 36AD of the *Electricity Act 1996* refers to the obligation to pay the minimum R-FiT as a "*condition of licence*". Since the commencement of the National Energy Retail Law in South Australia from 1 February 2013 there is no longer an obligation for electricity retailers (other than those retailing in "off-grid" areas of the State) to hold a licence; electricity retailers now hold "authorisations" issued by the Australian Energy Regulator and are termed "NERL retailers". Section 36AD still applies to NERL retailers however, pursuant to section 14E(2) of that Act, which provides that section 36AD "*… applies to a NERL retailer (despite the fact that it does not hold a licence under this Act)*".

other than an excluded network, that the retailer will, after taking into account any requirements prescribed by the regulations—

(a) credit against the charges payable by the qualifying customer for the sale of electricity to the qualifying customer the prescribed amount, or an amount determined by the retailer, being an amount greater than the prescribed amount, for electricity fed into the network in excess of the electricity used by the qualifying customer.

The Commission would again emphasise the *minimum* nature of the regulated R-FiT envisaged under the Electricity Act. The *prescribed amount* set by the Commission is intended to operate as a floor price, with electricity retailers able to determine amounts greater than that which they may offer to PV customers.

For the purposes of that section, the *prescribed amount* is the amount determined by the Commission from time to time through a price determination made in accordance with section 35A of the Electricity Act.[14]

Section 36AD(1) imposes a statutory, rather than a contractual, obligation on an electricity retailer to make R-FiT payments to its PV customers. This has three key consequences.

First, all electricity retailers operating in the NEM are now required, under the National Energy Retail Law, to have available a Standing Offer for small customers, including PV customers. To the extent that any PV customer is entitled to be sold electricity by an electricity retailer under a Standing Offer, then section 36AD(1) will require that electricity retailer to make R-FiT payments, even if the terms of the Standing Offer make no provision for such payments to be made.

Second, in the case of Market Offers, electricity retailers are not obliged to provide those offers to all small customers – they may elect to refrain from making Market Offers available to particular customers or customer classes.

Third, even though an electricity retailer might actively seek to avoid PV customers, it may not be possible for it to do so. Under the terms of the R-FiT regime, if a customer on that "non-PV" electricity retailer's Market Offer installs a qualifying PV unit during the life of that contract (and assuming that the installation of a PV unit does not bring the contract to an end under the terms of the Market Offer) then on and from the date of connection of that PV unit the customer will be entitled to receive R-FiT payments. This is so notwithstanding that the terms of the Market Offer make no provision for such payments to be made.

[14] *Electricity Act 1996*, section 36AC(1).

2.2.2 The Commission's authority to make an R-FiT determination

Section 35A provides, in turn, that:

> *(1) The Commission may make a determination under the Essential Services Commission Act 2002 regulating prices, conditions relating to prices and price-fixing factors for—*
>
> *****
>
> *(ba) the feeding-in of electricity into a distribution network under Division 3AB;*

While 35A(1)(ba) is expressed in general terms (prices, conditions relating to prices and price-fixing factors) it needs to be construed alongside the terms of section 36AD, which require the Commission to determine *an amount*.

This means that for any determination of the prescribed amount, a particular amount (an ascertainable value) must be set. This includes setting zero as the amount.

In this sense, the R-FiT operates in a similar manner to the former electricity standing contract price determination provisions of the Electricity Act, which required the Commission to *fix* a standing contract price, notwithstanding that its general price determination powers ordinarily permit it to make determinations by other means (for example, using methods such as prices, conditions relating to prices and price-fixing factors).[15]

That does not, however, mean that the Commission is prevented from including additional and complementary price control mechanisms within an R-FiT price determination – provided the determination at least fixes an amount it can also impose other forms of price control, such as price monitoring.[16]

2.2.3 Factors specified in the Electricity Act

As is explained in more detail below, when making a price determination the Commission is required under the ESC Act to "have regard to" various factors. Those include any factors set out in the Act providing the authority for the price determination to be made – in this instance the Electricity Act.

Section 35A(2a) of the Electricity Act provides that:

> *(2a) In addition to the requirements of section 25(4) of the Essential Services Commission Act 2002, the Commission must, in acting under subsection (1)(ba), have regard to the fair and reasonable value to a retailer of*

---

[15] See generally, Essential Services Commission, *Review of Energy Retail Price Setting Methodology, Discussion Paper*, October 2009, section 3.7 pages 22 to 25; available at http://www.escosa.sa.gov.au/library/091023-RetailPriceMethodologyReview-DiscussionPaper.pdf.

[16] *Essential Services Commission Act 2002*, section 25(3).

electricity fed into the network by qualifying customers within the meaning of Division 3AB.

While section 6A(4) provides that:

> *(4) In performing functions under this Act, the Commission must (in addition to having regard to factors specified in this Act or the Essential Services Commission Act 2002) have regard to the provisions of the National Electricity Rules and National Energy Retail Rules and the need to avoid duplication of, or inconsistency with, regulatory requirements under those Rules.*

The first of these additional factors is very important in the context of this review and is considered in detail in Chapter 3. In summary, the effect of section 35A(2a) is to require the Commission to focus on the value to electricity retailers of fed-in energy, rather than the value to PV customers.

The second factor requiring the Commission to have regard to the National Electricity Rules and the National Energy Retail Rules is, however, not relevant to the making of an R-FiT price determination.

2.3 Price determination powers under the ESC Act

As section 35A(1)(ba) permits the Commission to make a price determination under the ESC Act, it is useful to consider that price determination regime.

Section 25 of the ESC Act permits the Commission to make a price determination[17] but only in cases where it is authorised to do so under a relevant industry regulation Act[18] (the Electricity Act is a relevant industry regulation Act).[19]

In this case, as shown above, the Commission is empowered under the Electricity Act to make an R-FiT price determination under the ESC Act should it choose to do so (subject to consideration of all statutory factors, as explained below).

2.3.1 Price regulation methodologies

Section 25(3) of the ESC Act sets out a non-exhaustive list of price regulation methodologies which the Commission may choose to implement in a price determination, including:

> *(a) fixing a price or the rate of increase or decrease in a price;*
>
> *(b) fixing a maximum price or maximum rate of increase or minimum rate of decrease in a maximum price;*
>
> *(c) fixing an average price for specified goods or services or an average rate of increase or decrease in an average price;*

[17] *Essential Services Commission Act 2002*, section 25(1).
[18] *Essential Services Commission Act 2002*, section 25(2).
[19] *Electricity Act 1996*, section 14D.

(d) specifying pricing policies or principles;

(e) specifying an amount determined by reference to a general price index, the cost of production, a rate of return on assets employed or any other specified factor;

(f) specifying an amount determined by reference to quantity, location, period or other specified factor relevant to the supply of goods or services;

(g) fixing a maximum average revenue, or maximum rate of increase or minimum rate of decrease in maximum average revenue, in relation to specified goods or services;

(h) monitoring the price levels of specified goods and services.

Under section 25(6) of the ESC Act, this general power to select a price regulation methodology can be constrained by the terms of the authorising Act. In this case, as explained in section 2.2.2, the R-FiT provisions of the Electricity Act mean that the Commission must determine a prescribed amount.

As noted earlier, however, while the Commission must determine a prescribed amount (as opposed to a price range, for example), subject to it doing so there is nothing in the statutory scheme which would prevent the Commission from also implementing complementary arrangements, such as price monitoring to assess the effectiveness of the prescribed amount.

2.3.2 Factors to take into account and matters to ensure

Section 25(4) of the ESC Act sets out a range of factors to which the Commission must have regard when making a price determination. That section provides that, in addition to the general factors set out in section 6 of the ESC Act (refer section 2.1 above), the Commission must also have regard to:

(a) the particular circumstances of the regulated industry and the goods and services for which the determination is being made;

(b) the costs of making, producing or supplying the goods or services;

(c) the costs of complying with laws or regulatory requirements;

(d) the return on assets in the regulated industry;

(e) any relevant interstate and international benchmarks for prices, costs and return on assets in comparable industries;

(f) the financial implications of the determination;

(g) any factors specified by a relevant industry regulation Act or by regulation under this Act;

(h) any other factors that the Commission considers relevant.

As noted in section 2.2.3 above, two additional factors – the requirement to have regard to the fair and reasonable value to an electricity retailer and the requirement to have regard to the National Electricity Rules and National Energy Retail Rules – are contained in the Electricity Act and must, under section 25(4)(g), be considered by the Commission.

In addition to those factors, section 25(5) of the ESC Act provides that the Commission must ensure that:

> *(a) wherever possible the costs of regulation do not exceed the benefits; and*
>
> *(b) the decision takes into account and clearly articulates any trade-off between costs and service standards.*

It is the Commission's role to consider how best to have regard to these matters and how much weight to give each. Ultimately, the Commission is guided by its primary statutory objective – the protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services.

3. IS ONGOING REGULATION OF THE RETAILER FEED-IN TARIFF NECESSARY?

- ***There has not been sufficient evidence of competition for PV customers to conclude that deregulation of the R-FiT would be in the long-term interests of consumers.***
- ***Therefore, the Commission intends to continue to regulate the R-FiT for a further two-year period, with the value itself to be updated annually. The Commission will review the need for continued regulation prior to the expiration of the two-year period.***

Under the Electricity Act and ESC Act, the Commission is required to consider several factors to determine if it is in the long-term interests of consumers for the R-FiT to be regulated beyond 1 January 2015 and, if so, the level at which the R-FiT should be set. Consistent with the approach taken in its 2013 R-FiT Determination, the Commission's consideration of those factors has been undertaken in the context of five themes:

- definition of the R-FiT market
- the fair and reasonable value of PV electricity to electricity retailers
- promotion of competition, efficiency and fair market conduct
- evidence on R-FiT equivalents from other jurisdictions, and
- deregulation and the costs of regulating.

On some of these factors, the Commission considers that the positions reached in the 2013 R-FiT Determination remain valid and, in the absence of evidence to the contrary, those positions do not need to be revisited in detail in this Review. The Commission's consideration in the following sections is therefore limited to examining whether or not there is any evidence that would have implications on the need for, and nature of, future regulation of the R-FiT

3.1 Definition of the R-FiT market

The decision to apply regulation, such as price regulation, generally relies on a definition of the relevant market in which a particular good or service is sold and an assessment as to whether or not market failure exists. Regulation is generally imposed to prevent businesses not subject to sufficient competitive pressures from exercising market power to the detriment of consumers.

The overview of the R-FiT scheme and the statutory provisions in the previous Chapters set out the Commission's consideration of the broad circumstances of the matters within section 25(4)(a) of the ESC Act.[20]

3.1.1 Determining the relevant market

Consistent with the view reached in the 2013 R-FiT Determination, the Commission considers that the relevant market is the South Australian electricity small customer retail market. The R-FiT is best characterised as a discretionary add-on to an existing product within the broader electricity small customer retail market, and that if there is sufficient competition in both the overall market and the market for PV customers, retail electricity prices will reflect costs and R-FiT payments will reflect value.

The view that the PV market forms part of the broader electricity retail market is also supported by the correlation between the PV and non-PV customer switching rates, whereby a PV customer's decision to switch will be based on both the electricity usage prices and the exported R-FiT amount. This matter is addressed further in section 3.2.1 below.

3.2 Promotion of competition, efficiency and fair market conduct

As a general principle, the Commission holds the view that, if a market is sufficiently competitive, price setting is a matter best determined by that market rather than by a regulator. That proposition is consistent with the factors specified in section 6 of the ESC Act, which focus the need to:

- promote competitive and fair market conduct - section 6(b)(i)
- prevent misuse of monopoly or market power - section 6(b)(ii)
- facilitate entry into relevant markets - section 6(b)(iii)
- promote economic efficiency - section 6(b)(iv), and
- ensure consumers benefit from competition and efficiency - section 6(b)(v).

The Commission holds the view that effective competition is in the long-term interests of consumers, as effective competition is best able to deliver efficient prices and services. Once there is sufficient evidence of effective market competition, it is likely that a transitional period will be required before complete deregulation can occur. This period is likely to require some form of interim regulation. .

The competition assessment set out in the following sections is built upon assessments previously carried out by the Commission and by the Australian Energy Market Commission (**AEMC**). Accordingly, the Commission has not undertaken a full competition assessment of

[20] Section 25(4)(a) of the ESC Act requires the Commission to have regard to the particular circumstances of the relevant regulated industry and goods and services.

the overall retail energy market for this review. Rather, its consideration is limited to examining whether or not there is any evidence which indicates that the extent of competition for PV customers is different to non-PV customers.

The most recent assessment by Australian Energy Market Commission has found that competition continues to be effective in the electricity retail market in South Australia, based on five indicators: customer activity, barriers to entry, exit and expansion, independent rivalry, customer satisfaction and retailer outcomes.[21] In particular, AEMC made the following observations in respect to the electricity retail market in South Australia:

- South Australia has the highest proportion of customers on energy market offers (80%) of all the national electricity market (NEM) jurisdictions and customers are proactively investigating options (one in three investigating their options last year) and there are high switching rates for customers switching between offers and retailers
- Although entry, exit and expansion in the market is considered to be relatively easy by retailers, some retailers noted challenges in expanding in the electricity market without having interests in generation assets
- There is strong rivalry in retail electricity markets (as evidenced by retailers offering different levels of discounts and incentives) despite the high market concentration, with second tier retailers increasingly active
- Most customers were found to be satisfied with the level of choice in the market and with their current retailer, though some perceived little difference between the choices available, and
- Raising consumer awareness about the energy price comparator tool may enable consumers to be better shoppers and engage more effectively with the market.

3.2.1 Assessing competition, efficiency and fair market conduct

The Commission's considerations of the matters to take into account in considering issues of competition, efficiency and fair market conduct, are summarised below.

Market concentration

As at July 2014, there were 16 electricity retailers who were offering to sell electricity to South Australian residential and small business customers. Of these 16 retailers, 13 electricity retailers were catering to PV customers.

In terms of concentration, the South Australian electricity retail market remains concentrated; with 4 retailers, AGL SA, Origin Energy, EnergyAustralia and Simply Energy,

[21] Australian Energy Market Commission, 2014 Retail Competition Review, 22 August 2014, available at: http://www.aemc.gov.au/getattachment/3fccbed6-ebf8-4edb-86c9-71ff22eced08/Final-report.aspx.

having a combined South Australian small customer market share of around 86%, holding 48%, 20%, 10% and 9% of the market respectively.[22]

Standing offers and the R-FiT

The Standing Offer regime is a part of the National Energy Customer Framework, arising under the National Energy Retail Law. Under that regime, each electricity retailer must have a Standing Offer available to small customers on request. The price of Standing Offers is set by the electricity retailers.

However, there is no general obligation to sell electricity under Standing Offer terms and conditions to any small customer at any premises on request; the obligation only arises where the electricity retailer sold electricity to the immediately preceding customer (or the same customer) at the same premises.

As the R-FiT provisions of section 36AD(1) of the Electricity Act oblige electricity retailers to make at least the *minimum* R-FiT payments to PV customers, and given that under the Standing Offer regime an electricity retailer may not refuse to provide a Standing Offer to a customer who has installed a PV unit, then it follows that all 16 electricity retailers must offer at least the *minimum* R-FiT to Standing Offer PV customers.

It should be noted that the Standing Offer prices tend to be the highest available prices in the market. This means that the total value to a PV customer of the *minimum* R-FiT and the Standing Offer price will generally be lower than the total value to a PV customer of the *minimum* R-FiT and Market Offer price: a Market Offer should provide an overall "better deal".

The latest retail energy market performance report for quarter 3 of 2013-14 released by the AER shows that around 83% of electricity small customers in South Australia were on a Market Offer.[23]

Market Offers and the R-FiT

A Market Offer is any retail electricity sale arrangement other than a Standing Offer.

Electricity retailers generally offer a range of Market Offers; each may have different terms, conditions and prices including discounts, bonuses, different billing periods, different payment options, fixed contract terms and early termination fees. As with Standing Offers, prices under Market Offers are set by electricity retailers.

In general, electricity retailers provide customers with a range of Market Offers with different price and service mixes. In a competitive market, an electricity retailer has discretion regarding discounts and benefits applied to all market contracts it offers. This applies to both customers who have PV units and those who do not.

---

[22] Essential Services Commission of South Australia, *South Australian Energy Retail Prices – Ministerial Pricing Report 2014*, 31 August 2014, available at: http://www.escosa.sa.gov.au/library/140831-EnergyRetailPricesInSA-MinisterialPricingReport2014.pdf.

[23] Australian Energy Regulator, *Retail energy market performance update for Quarter 3, 2013-14*, 21 May 2014, available at: http://www.aer.gov.au/node/25111.

Electricity retailers generally use the flexibility of Market Offers to differentiate their products and compete for market share. The proportion of customers on such offers is therefore a key indicator of the extent of competition in the energy market. Retail market data published by the AER indicates that the proportion of small customers on a Market Offers continues to increase in South Australia.

As is the case for a Standing Offer, section 36AD(1) of the Electricity Act means that, even if an electricity retailer does not wish to retail to a PV customer and make R-FiT payments, if a customer installs a PV unit during the term of a Market Offer then that customer is entitled to receive at least the *minimum* R-FiT payments. An exception to that situation would be where the terms of the Market Offer are such that it comes to an end if the customer installs a PV unit.

Level of the R-FiT under Market Offers

As at July 2014, 13 out of the 16 electricity retailers were explicitly advertising an R-FiT to PV customers. The remaining three electricity retailers do not actively market to solar PV customers.[24]

Of the 13 electricity retailers offering an R-FiT payment, only four (AGL SA, Alinta, Diamond Energy and Powerdirect) were offering a payment in excess of the *minimum* R-FiT value set by the Commission. Although the remaining electricity retailers elected to make the minimum R-FiT payments to their PV customers, it is important to note that not all of those retailers reduced their R-FiT payments with immediate effect from 1 January 2014 (when the current R-FiT price determination took effect).

The R-FiT payments offered by those four retailers offering a premium over the *minimum* R-FiT (holding a collective market share of around 54%) were either 8.0 cents/kWh or 9.8 cents/kWh. Between December 2013 and July 2014, the market shares of those four retailers increased by 0.03%.

[24] However, these three electricity retailers are obliged to make the minimum R-FiT payments if any of their existing customers install solar PV units.

Table 3-1: Level of R-FiT payments offered by electricity retailers between December 2013 and July 2014 (cents/kWh) (GST exclusive)

		2013[25]		2014[26]					
		DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
MAJOR RETAILERS	AGL SA	9.8	9.8	8.0	8.0	8.0	8.0	8.0	8.0
	EnergyAustralia	9.8	9.8	9.8	9.8	9.8	7.6	7.6	7.6
	Origin Energy	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Simply Energy	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
OTHER ELECTRICITY RETAILERS	Alinta Energy	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
	Diamond Energy	9.8	9.8	8.0	8.0	8.0	8.0	8.0	8.0
	DoDo Power and Gas	-	-	7.6	7.6	7.6	7.6	7.6	7.6
	Lumo Energy	9.8	9.8	9.8	9.8	9.8	9.8	7.6	7.6
	Momentum Energy	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Powerdirect	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	QEnergy	-	-	-	-	-	-	-	-
	Red Energy	-	-	-	-	-	-	-	-
	Sanctuary Energy	9.8	9.8	9.8	9.8	9.8	9.8	7.6	7.6
	Commander Power & Gas	-	-	-	7.6	7.6	7.6	7.6	7.6
	ERM Power Retail	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Pacific Hydro	-	-	-	-	-	-	-	-

Source: ESCOSA's internal retail market monitoring

Incidence of Market Offers available to PV customers

A further point to consider is the incidence of Market Offers which are available to PV customers.

While, as noted above, electricity retailers are obliged to make R-FiT payments, for the purposes of reviewing levels of competition it is the extent to which electricity retailers are actively seeking out PV customers' business that is relevant.

[25] The *minimum* R-FiT value in December 2013 was 9.8 cents/kWh.

[26] The *minimum* R-FiT value for January 2014 to June 2014 was 7.6 cents/kWh.

One way to assess that is by considering the extent to which electricity retailers make their best-priced Market Offers available to PV customers. There are two possible reasons why electricity retailers may not make those offers available to PV customers. First, there may be additional costs involved with serving PV customers. Second, there may be insufficient competition for PV customers.

As shown in Table 3-2[27] and Table 3-3[28], of the 16 electricity retailers (with the market share of each shown in brackets below):

- nine retailers, Origin Energy (20%), Simply Energy (9%), Lumo Energy (6%), Momentum Energy (2%), Sanctuary Energy (0.1%), Diamond Energy (<0.1%), Dodo Power and Gas (<0.1%), Commander Power and Gas (<0.1%) and ERM Power Retail (<0.1%), (in total 37%) made their best-priced Market Offer available to PV customers. This is a deterioration (in market share terms) from the eight retailers (holding a collective market share of 96%) who made their best-priced Market Offer available to PV customers as at 30 July 2013.
- five retailers, AGL SA (48%), Energy Australia (10%), Alinta Energy (3%), Powerdirect (3%), and Pacific Hydro (<0.1%), (in total 64%) did not make their best-priced Market Offer available to PV customers and, of those:
    - their best-priced residential PV Market Offer ranged from being $53 (EnergyAustralia) to $242 (Alinta Energy) higher than their best-priced Market Offers, and
    - four retailers, AGL SA, Alinta Energy, Powerdirect and Diamond Energy were also making R-FiT payments above the *minimum* value.
- The remaining two retailers, QEnergy and Red Energy with a combined market share of 0.5%, do not actively market to PV customers.

Further, the EnergyMadeEasy website provides evidence to suggest that, as at July 2014:

- seventy-one out of the 110 electricity Market Offers were available to small PV customers. At December 2013, the proportion was 72 out of 97 electricity Market Offers
- five retailers (Dodo Power and Gas, Lumo Energy, Momentum Energy, Origin Energy and Simply Energy) were offering the same number of electricity offers to both PV and Non-PV residential customers
- seven retailers (Alinta Energy, Commander Power & Gas, ERM Power Retail, Lumo Energy, Momentum Energy, Origin Energy and Simply Energy) were offering the same number of electricity offers to both PV and Non-PV small business customers

[27] The figures in Table 3-2 were sourced from the EnergyMadeEasy website, excludes GST and includes all conditional and non-conditional discounts for a typical residential customer consuming 5,000 kWh per annum (excluding off-peak and green energy).

[28] The figures in Table 3-3 were sourced from the EnergyMadeEasy website, excludes GST and includes all conditional and non-conditional discounts for a typical small business customer consuming 10,000 kWh per annum (excluding off-peak and green energy).

- Electricity retailers were continuing to offer a range of incentives to PV customers such as discounts on total usage charges and exemptions from paying certain fees and charges. The discounts offered by electricity retailers to residential PV customers ranged from 0% to 16%, and
- Only one retailer (Simply Energy) was charging an additional supply charge to residential customers with solar PV systems. Other than this exception, the early termination fees associated with PV and non-PV Market offers did not appear to be significantly different, with fees generally set based on the terms of the contract.

A further matter considered by the Commission is the market shares of the largest electricity retailers operating in South Australia and the extent to which they are making R-FiT payments either above the *minimum* R-FiT value or are making the *minimum* R-FiT available on their best-priced Market Offers.

As set out above, the four largest electricity retailers by market share in South Australia are AGL SA (48%), Origin Energy (20%), EnergyAustralia (10%) and Simply Energy (9%). The tables below show that only AGL SA was offering a payment in excess of the *minimum* R-FiT, and that two retailers (Origin Energy and Simply Energy) made their best-priced Market Offer available to PV customers alongside the *minimum* R-FiT payments.

It is also understood that AGL's decision to pay an 8.0 cents/kWh R-FiT in all jurisdictions (including South Australia) was a business decision to distinguish itself from other electricity retailers.[29] Accordingly, it could be inferred that AGL SA's decision to offer an R-FiT in excess of the minimum is a marketing-driven strategy as opposed to the business passing on the full value of the benefit that the retailer derives from fed-in electricity to its PV customers.

Under the current R-FiT regime, while best-priced Market Offers are made available to existing and potential new PV customers by nine electricity retailers in South Australia (with a combined market share of 37%), the best-priced Market Offers of the remaining retailers are not.

A final matter to note is that analysis carried out by the Commission shows that three of the four retailers making R-FiT payments above the minimum value were not offering their lowest priced Market Offer to PV customers. Accordingly, PV customers with an average consumption profile and smaller PV unit sizes may be financially worse off if they switch to a Market Offer with a relatively high R-FiT but do not receive the lowest energy prices. This is because the customer may be paying higher electricity usage prices, but is not benefiting from the higher R-FiT as they are unlikely to export much PV electricity back into the grid.

[29] Independent Pricing and Regulatory Tribunal, *Regulated Retail Gas Prices and Solar Feed-In Tariffs: Public Forum Transcript*, 13 May 2014, available at: http://www.ipart.nsw.gov.au/files/31b547eb-8812-4fde-941f-a33200a4900a/Transcript - Regulated retail gas prices and solar feed-in tariffs - 13 May 2014.pdf.

Table 3-2: Price based comparison of residential electricity offers in South Australia (as at July 2014) (GST exclusive)

		BEST-PRICED MARKET OFFER			BEST-PRICED MARKET OFFER FOR PV CUSTOMERS			
		Product Name	Estimated Annual Cost	Available to PV Customers?	Product Name	Estimated Annual Cost	R-FiT (cents/kWh)	Difference in cost between contracts
Higher R-FiT payments	**AGL SA**	Select 3% + $30 South Australia residential electricity no early termination fee market offer	$1,695	×	Advantage 7% South Australia residential electricity market offer	$1,771	8.0	$75
	Alinta Energy	Fair Go 15	$1,621	×	Standing Offer	$1,863	9.8	$242
	Diamond Energy	DE Residential Single Rate Solar	$1,625	✓	DE Residential Single Rate Solar	$1,625	8.0	$0
	Powerdirect	Powerdirect 12% South Australia residential electricity market offer	$1,717	×	Powerdirect 7% South Australia residential electricity market offer	$1,801	8.0	$84
Minimum R-FiT payments	**DoDo Power and Gas**	Residential Single Rate Market Offer (E5SAR-MAT1)	$1,492	✓	Residential Single Rate Market Offer (E5SAR-MAT1)	$1,492	7.6	$0
	EnergyAustralia	Everyday Saver - Home - Peak Only (Online offer)	$1,750	×	Power Plan - Home - Peak Only	$1,803	7.6	$53
	Lumo Energy	Lumo Advantage	$1,559	✓	Lumo Advantage	$1,559	7.6	$0
	Momentum Energy	Momentum SmilePower Flexi – No Exit Fee GD\QRSR\MRSR	$1,815	✓	Momentum SmilePower Flexi – No Exit Fee GD\QRSR\MRSR	$1,815	7.6	$0
	Origin Energy	eSaver - no exit fees up to 16% electricity usage discount (Single rate)	$1,743	✓	eSaver - no exit fees up to 16% electricity usage discount (Single rate)	$1,743	7.6	$0
	QEnergy	Home Discounter Single Rate	$1,704	×	N/A	N/A	N/A	N/A
	Red Energy	Living Energy Saver - Residential	$1,588	×	N/A	N/A	N/A	N/A
	Sanctuary Energy	Standard Negotiated Contract	$1,719	✓	Standard Negotiated Contract	$1,719	7.6	$0
	Simply Energy	SA Super Saver 17/10 DD EB	$1,599	✓	SA Super Saver 17/10 DD EB	$1,599	7.6	$0

Table 3-3: Price based comparison of small business electricity offers in South Australia (as at July 2014) (GST exclusive)

		BEST-PRICED MARKET OFFER			BEST-PRICED MARKET OFFER FOR PV CUSTOMERS			
		Product Name	Estimated Annual Cost	Available to PV Customers?	Product Name	Estimated Annual Cost	R-FiT (cents/kWh)	Difference in cost between contracts
Higher R-FiT payments	AGL SA	Select 11% South Australia small business electricity market offer	$3,182	×	Freedom 5% South Australia small business electricity no early termination fee market offer	$3,452	8.0	$270
	Alinta Energy	Small Business Standing Offer - 126	$3,504	×	Small Business Standing Offer - 126	$3,504	9.8	$0
	Diamond Energy	DE Non-Residential Single Rate Solar	$3,145	✓	DE Non-Residential Single Rate Solar	$3,145	8.0	$0
	Powerdirect	Powerdirect 18% South Australia small business electricity market offer	$3,286	×	Powerdirect 5% South Australia small business electricity no early termination fee market offer	$3,701	8.0	$415
Minimum R-FiT payments	Commander Power and Gas	South Australia Commander Business Offer (Single Rate)	$2,985	✓	South Australia Commander Business Offer (Single Rate)	$2,985	7.6	$0
	EnergyAustralia	Everyday Saver - Business - Peak Only (Online offer)	$3,465	×	Everyday Saver - Business - Peak Only	$3,691	7.6	$226
	ERM Power Retail	Adjustable	$3,005	✓	Adjustable	$3,005	7.6	$0
	Lumo Energy	Lumo Business Premium	$2,977	✓	Lumo Business Premium	$2,977	7.6	$0
	Momentum Energy	Momentum SmilePower E\QBSR\MBSR	$3,068	✓	Momentum SmilePower E\QBSR\MBSR	$3,068	7.6	$0
	Origin Energy	Business eSaver up to 15% electricity usage discount (Single rate)	$3,302	✓	Business eSaver up to 15% electricity usage discount (Single rate)	$3,302	7.6	$0
	Pacific Hydro	SA Business Smart 36 (No Exit Fee)	$2,975	×	N/A	N/A	N/A	N/A
	QEnergy	Freedom Biz	$2,604	×	N/A	N/A	N/A	N/A
	Red Energy	Living Energy Saver - Business	$3,044	×	N/A	N/A	N/A	N/A
	Simply Energy	SA SME Saver 18 - Tariff 126	$2,962	✓	SA SME Saver 18 - Tariff 126	$2,962	7.6	$0

Barriers to entry and expansion

The Commission considers that barriers to entry and expansion for electricity retailers are low in the PV element of the electricity retail market in South Australia, largely limited to the costs in upgrading billing systems.

For electricity retailers already selling electricity to customers, there are no entry barriers preventing them from seeking to also sell to PV customers, with retailer authorisation under National Energy Retail Law primarily aimed at ensuring competency to operate in the NEM.

Providing that a business meets the three entry criteria set out in the National Energy Retail Law (organisational and technical capacity, financial resources and suitability), there are minimal entry barriers for new entrants to the market. Accordingly, this creates a credible threat of competition for PV customers from new or existing electricity retailers in the market.

Information and transaction costs

All consumers are able to enter into Market Offers with an electricity retailer of their choice (although the range of Market Offers available to a particular customer will be subject to the entry terms and conditions set by electricity retailers).

Consumers play an important role in encouraging the efficient operation of markets. Through their choices, consumers encourage businesses to compete and innovate. If consumers do not have access to information – in a clear and accessible form – to understand the products on offer, then effective consumer participation will not occur.

Consumers are currently able to access a price comparison tool to compare different electricity retail products and make informed choices about electricity Standing and Market Offers. Further, electricity retailers are required under the National Electricity Retail Law to provide an Energy Price Sheet – a summary of the features, terms and conditions of each of their Standing and Market Offers.

To examine the accessibility and relevance of the information available to PV consumers, the Commission undertook a desktop review of the information on the Energy Made Easy website operated by the AER, electricity retailers' energy pricing fact sheets and electricity retailers' websites. The objective is to examine whether or not concerns expressed by the Commission in the 2013 R-FiT Review have been addressed.

The Commission found that, while information to facilitate informed decision-making is generally available to consumers, there remain gaps between different information sources and discrepancies in how information is disclosed to PV customers. For some electricity retailers, there were also discrepancies between the information supplied by those electricity retailers to be uploaded onto the EnergyMadeEasy website and those advertised on their websites (for example, number of available electricity offers).

The Commission considers that these issues indicate that there continue to be some inadequacies in terms of information and customer service provision for PV customers. In

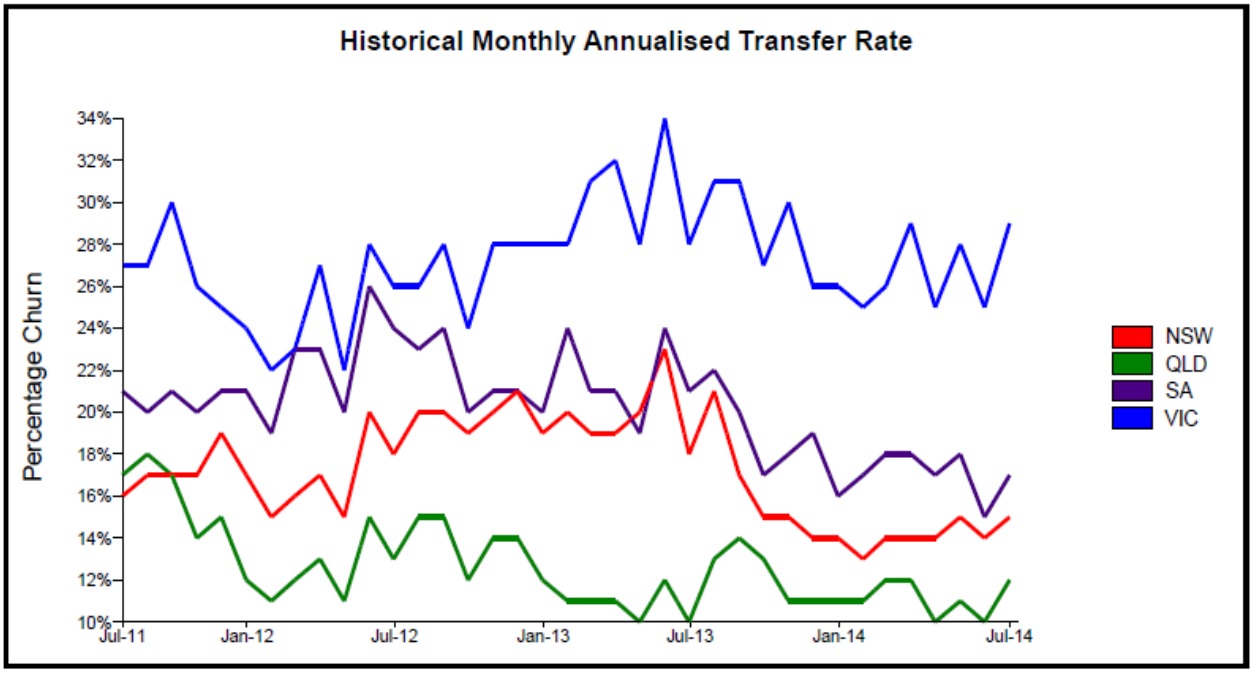
particular, the Commission is concerned that retailers' information disclosure practices are not assisting PV customers to compare offers easily nor do they assist customers to identify the offer best suited to their particular circumstances. The Commission's concern over information disclosure by retailers also applies to Market Offers generally. Regardless of the channel used, information should be provided in a standardised, consistent, concise and transparent manner that would facilitate informed decision-making of the various competing Market Offers by consumers.

Customer switching rates

The rate of customer switching between electricity retailers provides a key indicator of the intensity of competition for customers.

For the overall small customer retail electricity market, historical monthly transfer rate data published by AEMO indicates that South Australia continues to have a high transfer rate compared to most other jurisdictions until July 2013, as shown below. However, transfer rates have since continued to gradually decline.

Figure 3-1: AEMO comparative monthly transfer rates between electricity retailers



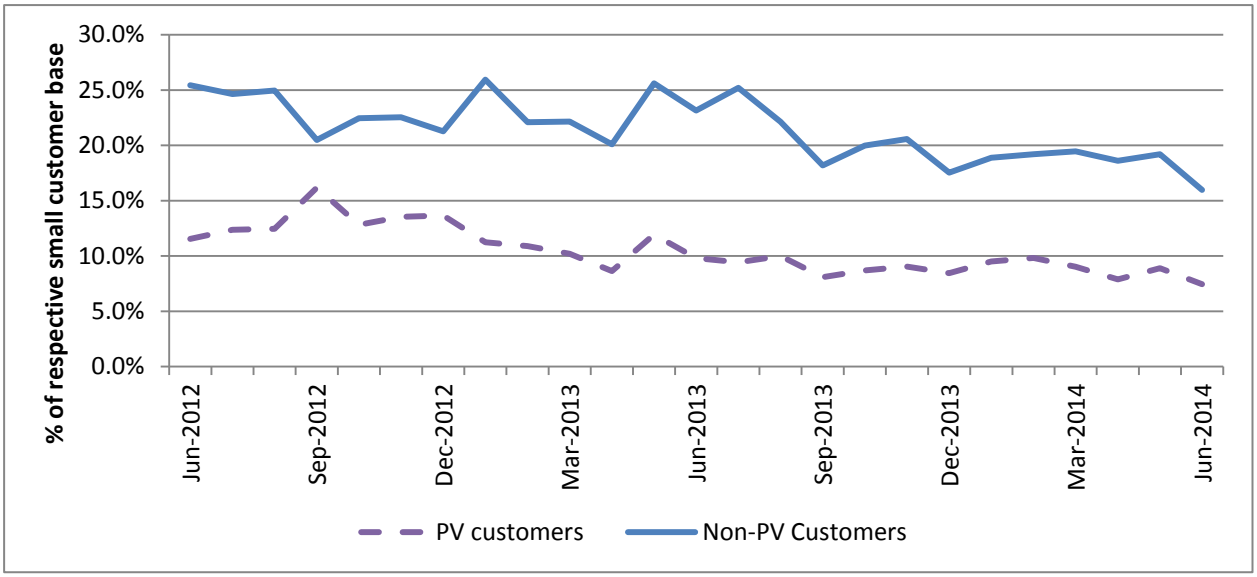
Source: Australian Energy Market Operator

For the purposes of developing this Draft Price Determination, the Commission has sought switching information for both PV and non-PV small customers from SA Power Networks and AEMO and compared that information using data obtained from electricity retailers.

The information provided by SA Power Networks and AEMO shows that switching rates of PV customers are generally well below switching rates of non-PV customers. This is generally consistent with the information provided by electricity retailers (presented below in

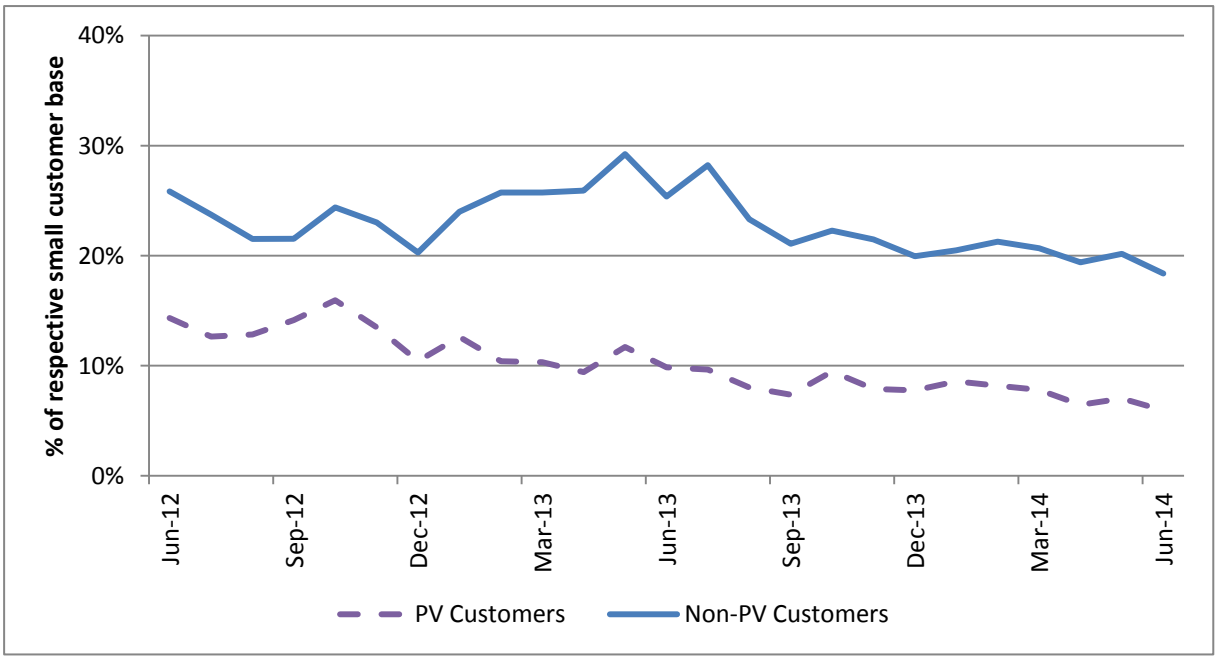
aggregate form). The figures show switching rates between retailers and switching rates within retailers (that is, changing Market Offers within the same retailer).

Figure 3-2: Historical monthly annualised transfer rate for small customers switching between retailers (SA Power Networks/AEMO data)



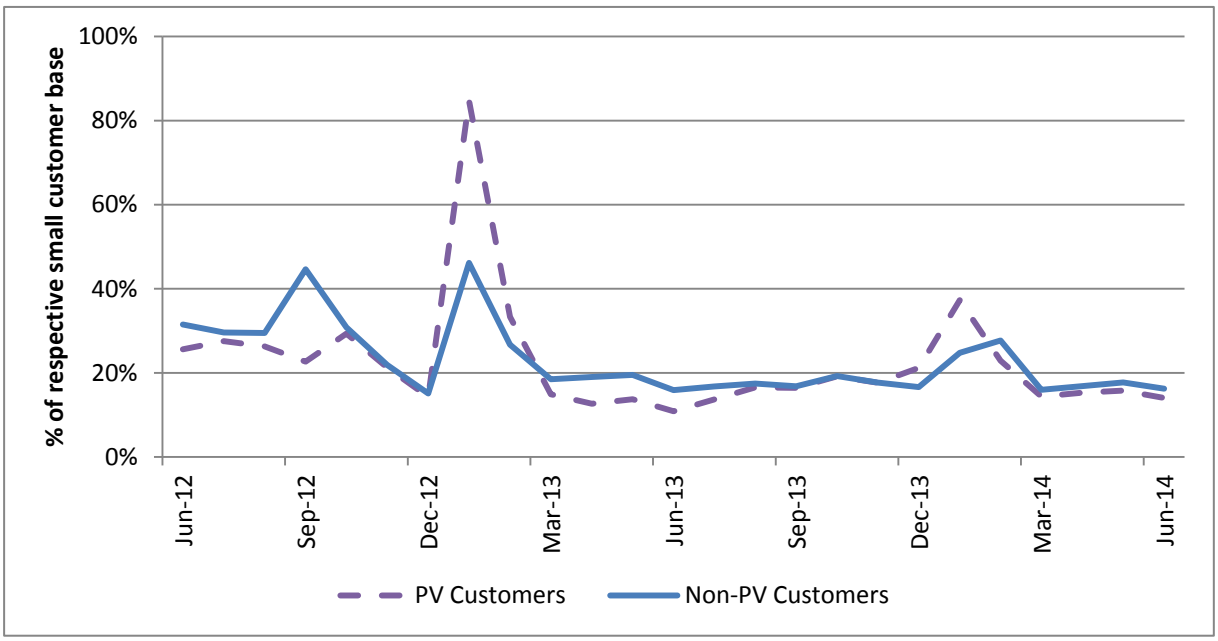
Source: SA Power Networks and Australian Energy Market Operator

Figure 3-3: Historical monthly annualised transfer rate for small customers switching from another electricity retailer (retailer data)



Source: Electricity retailers

Figure 3-4: Historical monthly annualised transfer rate for small customers switching between products offered by their existing electricity retailer (retailer data)



Source: Electricity retailers

The spike in the proportion of PV customers switching between products offered by their existing electricity retailer in December-January 2014 was primarily driven by the high level of marketing activity undertaken by a major retailer to target its internal electricity small customer base.

The above figures depicting the switching data provided by SA Power Networks/AEMO and electricity retailers both show that the switching rates for PV and non-PV customers are highly correlated, but that the switching rate for PV customers is substantially lower. The correlation between the PV and non-PV switching rates supports the view that the PV market forms part of the broader electricity retail market, whereby a PV customer's decision to switch will be based on both the electricity usage prices and the R-FiT amount. As the usage price of electricity imported from the grid is a major driver of a PV customer's bill, it seems logical that trends in PV and non-PV customer switching will follow each other, as both sets of customers generally face the same price movements.

The lower switching rate for PV customers may also be influenced by other factors. For example, the PV customers who export energy will generally have lower bills than non-PV customers and therefore have less financial incentive to switch retailers.

3.3 Evidence on R-FiT equivalents from other jurisdictions

The ESC Act provides that the Commission is to have regard to relevant interstate evidence when making price determinations:

- section 25(4)(e) requires the Commission to have regard to any relevant interstate and international benchmarks for prices, and

- section 6(b)(vii) requires the Commission to have regard to the need to promote consistency in regulation with other jurisdictions.

The Commission has therefore reviewed equivalent R-FiT arrangements in other jurisdictions, whether existing or proposed, as summarised in Table 3-4 below. The Commission has also summarised the R-FiT equivalent regimes in New South Wales, Queensland and Victoria, which are the largest jurisdictions in the NEM, in Appendix 1.

Table 3-4: Jurisdictional comparison of FiT arrangements

JURISDICTION	DISTRIBUTOR FIT (cents/kWh)	RETAILER FIT (cents/kWh)
Australia Capital Territory	30.16 - 50.05 Nil from 14 July 2011	7.5 (voluntary)
New South Wales	20 - 60 Nil from 29 April 2011	0 - 10 (voluntary)
Northern Territory	Nil	25.60 (1-for-1 FiT)
Queensland	8 - 44 Nil from 1 July 2014	0 - 8 (voluntary)
South Australia	16 - 44 Nil from 1 October 2013	7.6 (mandatory)
Tasmania	Nil	6.1 (mandatory)
Victoria	25 - 60 Nil from 1 January 2013	8 (mandatory)
Western Australia	40 - 60 Nil from 1 August 2011	Synergy: 8.8529
		Horizon Power (location specific) 10 - 50

3.4 Deregulation and the costs of regulating

Under the ESC Act, the Commission is required, in making a price determination, to have regard to the following factors:

- the costs of making, producing or supplying the goods or services: section 25(4)(b)
- the costs of complying with laws or regulatory requirements: section 25(4)(c), and
- facilitate maintenance of the financial viability of regulated industries and the incentive for long term investment: section 6(b)(vi).

In the current context, it is the Commission's view that these factors relate to the arguments as to "deregulation" of the R-FiT in the context of the costs of regulation under the R-FiT. Given the scheme of the R-FiT, deregulation means the circumstance where the Commission

either decides not to make an R-FiT price determination at all or does so but sets the prescribed minimum amount at zero.

In considering these factors, the Commission notes that there is a difference between the costs of regulation overall (that is, the administration of the R-FiT) and the actual costs of serving PV customers. In that latter context, in the absence of evidence that the costs of serving PV customers is related to kWh of PV electricity fed-in to the distribution network, then those costs should not affect the amount (in cents/kWh) determined for the R-FiT (although those costs may explain such outcomes as electricity retailers not making their best-priced Market Offers available to PV customers).

However, the Commission accepts that there may be additional administrative costs associated with the regulated *minimum* R-FiT and that those costs are relevant to the making of an R-FiT price determination. In reaching this position, the Commission has had regard to the costs of supplying R-FiT services, complying with R-FiT laws and regulatory requirements and the incentive for long term investment.

Of those factors, the first two are considered to have greater weight, as, in respect of the last matter, there is no evidence available to the Commission that would suggest that a potential new entrant retailer would avoid market entry merely on the basis of the R-FiT.

3.5 Other factors

The Commission also notes that section 25(4)(g) of the ESC Act requires the Commission to have regard to any factors specified by a relevant industry regulation Act. There are two such factors set out in the Electricity Act:

- section 35A(2a) - *have regard to the fair and reasonable value to an electricity retailer of electricity fed into the network by PV customers*: this matter is relevant in ascribing a value to the fed-in electricity, not in whether a determination should be made. As such this matter is considered in section 4.3 below, and
- section 6A(4) - *have regard to the provisions of the National Electricity Rules and National Energy Retail Rules and the need to avoid duplication of, or inconsistency with, regulatory requirements under those Rules*: as noted earlier,this matter is not relevant in respect of an R-FiT price determination and, as a result, has not been considered.

3.6 The draft decision to make a price determination

Under section 35A of the Electricity Act, the Commission has discretion as to whether or not it will make an R-FiT price determination at all.

In this case, the Commission's Draft Price Determination is to make a two-year price determination of the *minimum* R-FiT, with the value itself to be updated annually, and to set the *minimum* R-FiT value at the lower bound of a reasonable range of pricing outcomes.

The reasons underpinning the Commission's Draft Price Determination to make an R-FiT price determination are set out below.

3.6.1 Key reasons for making an R-FiT price determination

The primary reason for making an R-FiT price determination is the level of uncertainty around the extent to which electricity retailers will compete for PV customers and, consequently, the outcomes that may result if no R-FiT determination is made. The evidence to date is mixed, and is insufficient to support deregulation of the R-FiT at this point.

In light of these uncertainties, the Commission considers that it is appropriate to continue regulating the minimum R-FiT for a further period of time. In doing so, it will provide the Commission with more time to additional evidence on the competitiveness of the electricity retail market, informing any future decision as to whether or not deregulation of the R-FiT is in the long-term interests of consumers.

It is also important to note that, if the Commission does not make a price determination, its powers to monitor the market and request information from retailers or other parties may be more limited. If it does make a price determination, the ESC Act permits the Commission to invoke complementary price-monitoring arrangements.

In reaching this Draft Price Determination to make an R-FiT price determination, the Commission has considered the following areas where there is mixed evidence regarding the extent of competition among electricity retailers for PV customers.

- ***Switching rates*** – the extent to which customers elect to switch between market offers and between retailers is generally considered to be a key indicator of competition. Switching data provided by SA Power Networks/AEMO and electricity retailers both show that the switching rates for PV and non-PV customers are highly correlated, but that the switching rate for PV customers is substantially lower.

  The correlation between the PV and non-PV switching rates supports the view that the PV market forms part of the broader electricity retail market, whereby a PV customer's decision to switch will be based on both the price of purchased electricity and the R-FiT amount. As the usage price of imported electricity is a major driver of a PV customer's bill, it seems logical that trends in PV and non-PV customer switching will follow each other, as both sets of customers generally face the same price movements.

  Although the low switching rate for PV customers raises some doubts about the level of competition for those customers, it could also be due to the fact that PV customers that export energy will generally have lower bills than non-PV customers and, therefore, have less to gain from switching between market offers.

- ***Incidence of Market Offers to PV customers*** – PV customers continue to have limited access to the range of products offered by electricity retailers in South Australia. As at the end of July 2014, only nine of the sixteen electricity retailers (holding a collective market share of around 35%) were making their best-priced Market Offers available to PV customers. Origin Energy and Simply Energy (with a combined market share of around 28%) were the only major electricity retailers to do so.

Although there are a number of possible reasons why electricity retailers are not making their best-priced Market Offers available to PV customers (e.g. there may be additional costs involving with serving these customers), it may also indicate insufficient competition for PV customers.

- ***Incidence of minimum payments*** – by 30 July 2014, nine of the 13 electricity retailers selling to PV customers were paying the minimum R-FiT of 7.6 cents/kWh, which was reduced from 9.8 cents/kWh from 1 January 2014.

  However, it is important to note that not all of those nine retailers reduced their R-FiTs with immediate effect from 1 January 2014.

- ***Incidence of higher R-FiT payments*** – by 30 July 2014, four of the 13 retailers selling to PV customers were making R-FiT payments above the minimum value, with AGL SA being the only major electricity retailer to do so. The R-FiT payments offered by those four retailers (holding a collective market share of around 54%) were set at either 8.0 cents/kWh or 9.8 cents/kWh.

  However, analysis carried out by the Commission shows that the higher R-FiTs offered by three of the retailers were subsidised through higher electricity usage prices to those same customers. PV customers with an average consumption profile and smaller PV unit sizes will, therefore, be financially worse off because they are paying higher electricity usage prices, but not benefitting sufficiently from the higher R-FiTs, as they are unlikely to export material flows of PV electricity back into the grid.

  This may suggest that regulation of the R-FiT is not having a material impact on PV customers, to the extent that retailers are generally using higher market offers to subsidise higher R-FiT amounts, and that higher R-FiT payments do not necessarily provide the best overall deal for PV customers.

- ***Evidence arising from other jurisdictions*** – two of the three largest electricity retailers in New South Wales (AGL and EnergyAustralia) are currently offering voluntary R-FiT payments towards the higher end of IPART's recommended non-binding benchmark range of the value of fed-in PV electricity. The other retailer, Origin Energy, is making a voluntary R-FiT payment at the lower end of the benchmark range.

  However, the same three electricity retailers are currently paying the minimum R-FiTs (as determined by the Essential Services Commission in Victoria) despite having the flexibility to pay higher amounts.

  AGL SA, EnergyAustralia and Origin Energy are the three biggest electricity retailers in South Australia.

4. FORM AND NATURE OF REGULATION

4.1 Overview

Having reviewed the relevant factors under both the ESC Act and the Electricity Act, the Commission has formed the view that continuing regulation of the R-FiT is warranted. The next consideration for the Commission is the appropriate form and nature of regulation of the R-FiT to be implemented.

As previously noted, under section 35A of the Electricity Act, the Commission has discretion as to whether or not it will make an R-FiT price determination at all. Having decided to make a price determination, the key aspects of the Commission's draft decisions are:

- to make a two-year price determination – refer to section 4.2
- to set the methodology to calculate the fair and reasonable value of the R-FiT to set the *minimum* R-FiT value for 2015 and 2016 (or at any other time as may be required) using the methodology set out in section 4.3
- to set the *minimum* R-FiT value for 2015 at the lower band of the reasonable range of values, being 5.3 cents/kWh – refer to section 4.4, and
- to implement a formal price-monitoring regime – refer to section 4.6.

The reasons that underpin the Commission's Draft Price Determination to implement the above aspects of its determination are set out below.

4.2 The length of the R-FiT price determination period

In light of its Draft Price Determination to make an R-FiT price determination, it is necessary to determine the length of the regulatory period. The Commission has considered the advantages and disadvantages of shorter and longer regulatory periods, and presents its reasons for adopting a two-year price determination.

In general, the shorter the regulatory period, the greater the flexibility available to adjust or modify regulatory settings in response to changing market circumstances. The drawback, however, is that reviews impose costs on all stakeholders that participate in the review process (as well as on the Commission).

In contrast, the longer the regulatory period, the more time available to the Commission to collect evidence and to assess the effectiveness of its regulatory settings in the market. More evidence and the opportunity to consider this evidence would assist the Commission in its deliberations of any future decision as to whether or not deregulation of the R-FiT is in the long-term interests of consumers.

The key reasons underpinning the Commission's Draft Price Determination to make a two-year R-FiT price determination are set out below.

- ***Minimising administrative and regulatory costs*** – conducting annual reviews to determine the need for ongoing regulation of the R-FiT imposes costs on the Commission and all stakeholders that participate in the review process, including electricity retailers who provide data to the reviews. On the basis that competition is unlikely to materially change in the short term, the Commission considers that undertaking annual competition reviews and public consultations offers few benefits.

  Conducting an R-FiT review after two years strikes a more reasonable balance between the need to revisit the Commission's regulatory approach from time to time, and the desire to keep regulatory costs to a minimum.

- ***Effectiveness of the current approach*** – the Commission notes that the current approach has only been in place for 8 months (from 1 January 2014) and the evidence to date regarding the effectiveness of the current approach is mixed. Making a two-year price determination allows the Commission time to collect evidence and assess the effectiveness of this approach, and at the same time allows the R-FiT value itself to be updated (at least for 2016), ensuring that it continues to remain reflective of wholesale electricity cost movements.

4.3 The fair and reasonable value of PV electricity to electricity retailers

Having decided that it will make a two-year R-FiT price determination, the next matter for the Commission is to determine the level at which the R-FiT will be set.

Under section 35A(2a) of the Electricity Act, the Commission must have regard to the fair and reasonable value to an electricity retailer of electricity fed into the network by PV customers. It is important to emphasise that section 35A(2a) is focused on the value *to an electricity retailer*, not on the value of R-FiT payments to PV customers.

4.3.1 Determining a fair and reasonable value

There are two major considerations in determining a fair and reasonable value to a retailer of exported PV output.

Determining value by reference to electricity retailers

The Commission considers that the value should be focused on avoided direct costs, with the sources of value to an electricity retailer being measureable and ascribed to PV electricity. This direct beneficiary principle is consistent with the approach taken by the Commission, in the past, in quantifying a fair and reasonable R-FiT, and those adopted by economic regulators in other jurisdictions.

While the Commission accepts that there may be indirect benefits from PV electricity and the penetration of PV units in South Australia to the overall market, the value of those indirect benefits is excluded from its consideration of the value to a retailer because they either cannot be or reliably attributed to PV electricity.

Similarly, to the extent that there are any (distribution or transmission) network costs or benefits that may arise, those costs and benefits should be separately assessed as part of the Australian Energy Regulator (**AER**)'s regulatory processes and passed through to consumers through amended distribution charges.

Accordingly, the Commission does not consider that it should have regard to system-wide benefits or costs of PV generation or have regard to the incentives provided for consumers to install new PV units in determining a fair and reasonable value to a retailer of exported PV output.

Under this approach, the value of the R-FiT is significantly below the total retail price of electricity. The only costs that are avoidable by retailers as a result of exported PV generation, namely wholesale energy costs, comprise around 25% of the total retail price. PV exports have no impact on the other 75% of the retail cost of electricity, the largest component of which is network charges which comprise approximately 60% of the retail price.

Deriving a fair and reasonable value

The Commission previously identified there are three benefits from solar PV generation that directly accrue to electricity retailers (when electricity generated from PV units is fed into the network), and these are summarised below:

- ***Reduced wholesale electricity cost*** – When a retailer receives exported PV electricity from its customers, the amount of electricity they need to purchase on the wholesale market is reduced. This is the most significant source of value to electricity retailers from exported PV electricity.
- ***Avoided losses*** – The NEM rules require electricity retailers to purchase additional amounts of wholesale electricity to account for losses that will occur when the electricity moves through the distribution network system to the final connection point.[30] When the amount of wholesale electricity that a retailer needs to purchase is reduced due to exported PV electricity, the retailer also avoids incurring costs associated with electricity purchase to offset distribution losses.
- ***Avoided market and ancillary service fees*** – Electricity retailers pay market ancillary fees based on the amount of wholesale electricity purchased at the Regional Reference Node (**RRN**). When the amount of electricity that a retailer needs to buy on the wholesale market is reduced due to exported PV electricity, its liability for these market and ancillary fees is also reduced.

To quantify these direct benefits, the Commission considers that the value to a retailer of exported PV electricity should be calculated by:

[30] The same rate of losses is applied to all wholesale electricity purchases by retailers regardless of their customer's proximity to the RRN.

- ***estimating*** the wholesale spot price of electricity
- ***weighted*** *by* the Net System Load Profile (**NSLP**)[31]
- ***adjusted*** *for* distribution losses, and
- ***adjusted*** *for* market and ancillary service fees.

Based on these parameters, the Commission has engaged ACIL Allen Consulting (**AAC**) to provide it with independent expert advice on forecast expected market values to an electricity retailer of PV electricity fed into the distribution network. To minimise the potential for modelling uncertainty in adopting a single point estimate, AAC was also asked to provide a plausible reasonable range of R-FiT values which could be used for regulatory purposes.

Details of the methodology used by AAC to determine the value of PV electricity are contained in its report to the Commission.[32] In summary, that methodology involves:

- forecasting wholesale spot prices of electricity, based on electricity demand forecasts (energy and peak demand) published by AEMO and using AAC's *PowerMark ™* national electricity market model
- projecting the Net System Load Profile (**NSLP**) for South Australia, based on recent observations of the NSLP as published by AEMO and estimating the relationship between the NSLP load and the South Australian load using regression analysis
- projecting the total installed capacity and effective generation of PV units in South Australia
- combining the wholesale spot price forecasts with the projected NSLP to determine an NSLP-weighted spot price forecast
- adding the value of avoided network losses, obtained by analysing historic distribution loss factors for South Australia as published by AEMO, and
- deducting the cost of NEM market and ancillary service fees, based on the most recent actual fees published in AEMO's annual budget.

---

[31] The Net System Load Profile is the aggregated measurement of the electricity usage of all small customers on a half hourly basis. When PV units generate electricity, less is required from other generators and the NSLP is "reduced" by that amount. The reduction in the NSLP has two effects on the settlement of the wholesale electricity market. Firstly, the resulting NSLP-weighted price will be lower than it would be if PV systems were not in place (the price effect). Secondly, the total amount of electricity sold is reduced (the volume effect).

[32] ACIL Allen Consulting, *The Fair and Reasonable Value of Exported PV – Describing ACIL Allen's Methodology for Estimating the Fair and Reasonable Value of Exported PV Output in South Australia*, 29 July 2014; available at: http://www.escosa.sa.gov.au/library/20141002-Electricity-SolarRetailerFiT-FairReasonableValueExportedPVReport-ACILAllen.pdf.

4.4 The minimum R-FiT value for 2015

Based on its analysis of the 2015 NSLP-weighted South Australian electricity wholesale spot prices from 471 scenarios, AAC's advice is that the reasonable range of expected 2015 R-FiT values is between 7.4 cents/kWh (10th percentile value) and 5.3 cents/kWh (90th percentile value).[33]

Table 4-1: Projected value of exported PV output in South Australia in 2015 and 2014 (exclusive of carbon impacts)

	PROJECTION FOR 2015 (CENTS/KWH)	PROJECTION FOR 2014 (CENTS/KWH)
90th percentile	5.31	5.97
50th percentile	5.60	7.39
10th percentile	7.36	11.96

Source: ACIL Allen Consulting

The table above contrasts the projections for 2015 with those derived for 2014[34] (on a similar carbon exclusive basis) and it is noteworthy that not only are the values lower across the board, but also that the reasonable range of values has narrowed considerably. In its report, AAC noted that;

> *The current projection of the wholesale spot price has decreased since that prepared in September 2013 due to a general decline in demand in the NEM. This has led to a situation where the supply demand balance in the NEM is relatively 'loose'. That is, there are rarely times when generation capacity is in short supply. As those are the times when higher prices are experienced the prices summarised here are lower than has been projected on previous occasions. Further, the repeal of the carbon price has downward pressure on wholesale spot electricity prices.*

4.5 Setting a value at the lower bound of R-FiT values

In setting the minimum R-FiT value there is a risk that, if the Commission's determination of the minimum R-FiT value is higher than the fair and reasonable value to electricity retailers, retailers may increase Standing Offer and Market Offer prices to subsidise the higher R-FiT payments, to the detriment of all South Australian electricity consumers and/or they may stop marketing to PV customers (if the market is not sufficiently competitive)

[33] ACIL Allen Consulting, *The Fair and Reasonable Value of Exported PV – Calendar Year 2015 Estimate from Market Modelling*, 29 July 2014.

[34] ACIL Allen Consulting, *Estimated Value of Exported PV – Calendar Year 2014 – Update to include carbon price scenarios*, 7 November 2014; available at: http://www.escosa.sa.gov.au/library/20141002-Electricity-SolarRetailerFiT-EstimatedValuePVExportsReport-ACILAllen.pdf.

There is also the risk that, if the Commission's determination of the minimum R-FiT value is lower than the fair and reasonable value to electricity retailers, and the market for PV customers is not sufficiently competitive, PV customers will not realise that value.

Having considered the evidence before it, the Commission's Draft Price Determination is to continue setting the R-FiT at the lower bound of a reasonable range of pricing outcomes. Based on the advice of AAC, the Commission has determined that minimum R-FiT value for calendar year 2015 should be set at 5.3 cents/kWh.

In reaching its draft conclusion to continue setting a lower bound R-FiT value, the Commission has considered the following matters:

- ***Facilitating competition*** – the current approach provides the necessary room for electricity retailers to compete above the minimum amount and thus for the market to determine the efficient price, while also providing price protection to PV customers. This is consistent with the Commission's long-standing position that setting prices is a second-best outcome if markets are sufficiently competitive, and that there may be instances where it is necessary to provide sufficient headroom above a minimum price to facilitate competition and allow the market to determine the efficient price.

  This is also supported by recent work carried out by the AEMC, where it noted that effective competitive markets are in the long-term interests of consumers, and that headroom should be provided in regulated energy retail prices, to facilitate competition.[35]

- ***Effectiveness of the current approach*** – the Commission notes that the current approach has only been in place for 8 months (from 1 January 2014) and the evidence to date regarding the effectiveness of the current approach is mixed. Retaining the current approach under a two-year price determination will allow the Commission time to collect evidence and properly assess the effectiveness of this approach through a subsequent review process.

- ***Materiality between setting the R-FiT at different percentile values*** – the financial impact to PV customers from an R-FiT set at the lower bound (currently set at a 90 per cent probability of exceedance) versus a 50 per cent probability of exceedance is negligible.[36] PV customers with an average consumption profile (those consuming 5,000 kWh annually), and smaller than average PV systems, are unlikely to materially export to the grid and, therefore, would not receive any substantial R-FiT payments. Even for those customers with a larger-sized PV systems, the difference between setting the R-FiT at the 90th percentile or 50th percentile values is not material (and as detailed later in this paper, this would amount to an increase in payments to the consumer of

[35] Australian Energy Market Commission, *Advice on Best Practice Retail Price Regulation Methodology – Final Advice*, September 2013, available at: http://www.aemc.gov.au/Markets-Reviews-Advice/Advice-on-Best-Practice-Retail-Price-Regulation-Me.

[36] The 90th percentile and 50th percentile values, which forms the reasonable range, is 5.3 cents/kWh and 5.6 cents/kWh respectively.

approximately $3 under the scenarios modelled for 2015 – refer to the Customer Impact Analysis chapter for more detail).

4.6 Price-monitoring regime

The Commission's Draft Price Determination is to set a *minimum* R-FiT prescribed value with a formal price-monitoring regime to gain evidence of the extent, if any, to which electricity retailers might be paying amounts in excess of that value during 2015.

In this instance, having regard to the purposes proposed for the complementary price-monitoring regime, the Commission proposes that it will rely generally on publicly available data for this element of the price determination, noting, however, that it may seek other information from electricity retailers, if required.

The key design features of the Commission's proposed price monitoring frameworks are set out below.

4.6.1 Monitoring of Pricing Outcomes

Articulation of the manner in which prices, cost and market outcomes are to be monitored is important for the transparency and accountability of a price-monitoring regime.

Noting that electricity retailers structure their offers differently (for example, the number of tariff blocks and consumption bands), the monitoring approach must be sufficiently flexible to accommodate such differences. Accordingly, the Commission is proposing to adopt a hypothetical annual bill approach, based upon low, medium and high consumption profiles, to monitor prices of PV offers.

This approach is to be based on examining how the different charges would translate into individual bills. Examining the sensitivity of the results to different assumptions about usage and the amount of electricity fed back to the distribution network, will allow for meaningful comparison of electricity charges and R-FiTs across different retailers. This approach is consistent with the notion that consumers are interested in the combination of low electricity usage tariffs and high R-FiTs that maximises the net return to that individual.

Table 4-2 below summarises the different exporting profiles that the Commission proposes to match against the three main consumption profiles.

Table 4-2: Assumed consumption and exporting profiles of solar PV customers

CONSUMPTION PROFILES	EXPORTING PROFILES
Residential customers	
Low user (3,500 kWh per annum) Medium user (5,000 kWh per annum) High user (7,500 kWh per annum)	No amount exported (0 kWh per annum)
	Low amount exported (200 kWh per annum)
	Medium amount exported (400 kWh per annum)
	High amount exported (600 kWh per annum)
Small business customers	
Medium user (10,000 kWh per annum)	No amount exported (0 kWh per annum)
	Low amount exported (200 kWh per annum)
	Medium amount exported (400 kWh per annum)
	High amount exported (600 kWh per annum)

Under the proposed hypothetical annual bill approach, the Commission's analysis would differentiate by retailer, separately identifies the R-FiT values paid. The monitoring of pricing outcomes in the PV market is intended to complement the Commission's current role in publishing annual comparison reports energy retail prices for small customers in South Australia. For example, informing the Commission on whether or not PV customers are receiving comparable discounts compared to non-PV customers.

All data used for the monitoring of pricing outcomes will be sourced from Energy Made Easy and retailers' pricing fact sheets.

4.6.2 Monitoring of Non-Pricing Outcomes

The Commission will also monitor a set of non-pricing indicators. Conscious not to duplicate the energy retail market monitoring role performed by the AER, or to impose unnecessary regulatory burden on retailers, data for these indicators will generally be sought from public sources. However, the Commission may seek information that is not publicly available from electricity retailers, if required. Table 4-3 sets out the non-pricing indicators in the solar PV market to be monitored under the Commission's proposed price-monitoring regime.

Table 4-3: Indicators to be monitored

INDICATOR	COMMENT	DATA SOURCE
Innovation in solar offers	Examining whether PV customers have a good range of offers to choose from	Energy Made Easy and electricity retailers' websites
Number of solar offers	Examining whether PV customers have a good range of offers to choose from	Energy Made Easy and electricity retailers' websites
Number of retailers selling to PV customers	Examining whether PV customers have a good range of offers to choose from, and thereby putting pressure on retailers to compete for market share through competitive and innovative offers	Energy Made Easy and electricity retailers' websites
Terms and conditions of solar offers	Examining whether there are any impediments to customers switching between contracts and/or retailers (for example, exit fees and terms on contract)	Energy Made Easy and electricity retailers' websites
Level and accessibility of reliable information provided by retailers	Examining whether consumers have access to consistent and reliable information through different information sources to facilitate informed decision making (for example, pricing fact sheets or retailers' websites)	Energy Made Easy and electricity retailers' websites
Customer switching rates: PV and non- PV	Examining the switching rate of PV and non-PV customers from one electricity retailer to another and between offers with their incumbent retailer.	To be provided by electricity retailers to the Commission on a confidential basis

5. CUSTOMER IMPACT ANALYSIS

- ***The greatest value for a customer from a PV system lies in the avoided cost of purchasing retail electricity, not in the R-FiT.***
- ***For most PV customers, there would be minimal impact from a reduction in the R-FiT from 6.0 to 5.3 cents per kWh.***
- ***A customer with average annual consumption of 5,000 kWh and a 4kW solar system will experience a fall in R-FiT revenue of approximately $8 per annum. The precise impacts will, however, depend on the consumption and export profile of each customer.***

The installation of PV units in South Australia has grown strongly in recent years, due to a combination of reasons including falling system costs, rising electricity prices, support from a range of government incentives, and the growing appeal of green energy independence.

To inform public debate about the impact of this Draft Price Determination, the Commission has undertaken analysis to quantify the financial benefits of PV electricity, customer impact as a result of the proposed reduction in the minimum R-FiT value.

The analysis set out in the following sections relies on several assumptions. The results of the analysis will change if these assumptions change.

In summary, the modelling demonstrates the following:

- Reduced electricity bills are the most significant source of financial benefits associated with PV energy, and that all PV customers benefit from these savings. Further, the size of these savings increases as the retail price of electricity increases.
- PV customers with smaller than average sized PV systems are unlikely to materially export to the grid and, therefore, would not receive any substantial R-FiT payments. Accordingly, those customers are not likely to be materially affected by the reduction in the minimal R-FiT value from 6.0 cents/kWh to 5.3 cents/kWh, as a result of this Draft Price Determination.
- PV customers with an average consumption profile (those consuming 5,000 kWh annually) and larger-sized PV systems, may see a reduction as a result of this Draft Price Determination amounting to around $8 annually. However, retailers are not required to reduce their R-FiT values to the minimum value set by the Commission.

5.1 Analysis of financial benefits associated with PV electricity

For PV consumers, there are two sources of ongoing financial benefit – reduced electricity bills, and potential revenue from FiTs. The Commission emphasises that the size of these

benefits varies between PV customers, as they are influenced by a number of factors such as the size of the PV system, the electricity usage rates they pay, the pattern of electricity consumption and the exporting profile of the PV customer.

Electricity bill savings

The generation output of a PV unit is a substitute for the need to purchase electricity from an electricity retailer. When the electricity generated from a PV unit is used to meet household consumption, the PV customer can either avoid (or reduce) the amount of electricity that they import from the grid, and therefore avoid (or reduce) paying retail electricity prices. At the end of June 2014, the average retail electricity usage price in South Australia was around 30 cents/kWh (GST exclusive).

The Commission's modelling shows that the magnitude of electricity bill savings varies between PV customers, ranging from $460 (for PV customers with a 1 kW PV unit) to $1,840 (for PV customers consuming 7,500 annually and with a 4 kW PV unit). Figure 5-1 illustrates the potential savings that PV customers of different consumption profiles and PV unit sizes can expect to realise.

Further, it is important to recognise that the magnitude of those savings will increase in line with any future increases in the retail electricity usage prices – that is, for example, a five percent increase in the retail electricity usage price will lead to a corresponding five per cent increase in savings.

Potential revenue from feed-in tariffs

When the electricity generated from a PV unit exceeds that required to meet household consumption, the excess PV electricity is fed back into the grid. Under the FiT scheme, each kWh exported (as measured quarterly) entitles a PV customer to receive R-FiT payments, subject to various limitations and qualifications set out in the Electricity Act. For most PV customers, revenues from R-FiT payments are smaller and less certain.

The Commission's modelling shows that most PV customers are unlikely to earn any substantial revenue from R-FiT payments on the basis that most of the generated PV electcitiy would be consumed at the premises, leaving little or none available to be fed back into the grid. Figure 5-1 shows that it is likely that only PV customers with low to medium consumption profiles and larger-sized PV units would receive any R-FiT payments. However, the value of those payments is still significantly lower than the savings on their electricity bills.

5.2 Analysis of customer impact as a result of the reduction in the minimum R-FiT value

Using the same set of modelling assumptions, the Commission has sought to examine the impact on PV customers, as a result of its Draft Price Determination to reduce the minimum R-FiT value from 6.0 cents/kWh to 5.3 cents/kWh.

Figure 5-2 indicates that PV customers with an average consumption profile (those consuming 5,000 kWh annually), and with smaller than average PV systems, are unlikely to be affected by the reduction in the minimum R-FiT value because they do not export any PV electricity back into the grid. For those customers with larger-sized (4kW) PV units, and who do export PV electricity back into the grid, the impact of the reduction in minimum R-FiT value amounts to around $8 annually.

Figure 5-1: Analysis of financial benefits associated with PV electricity

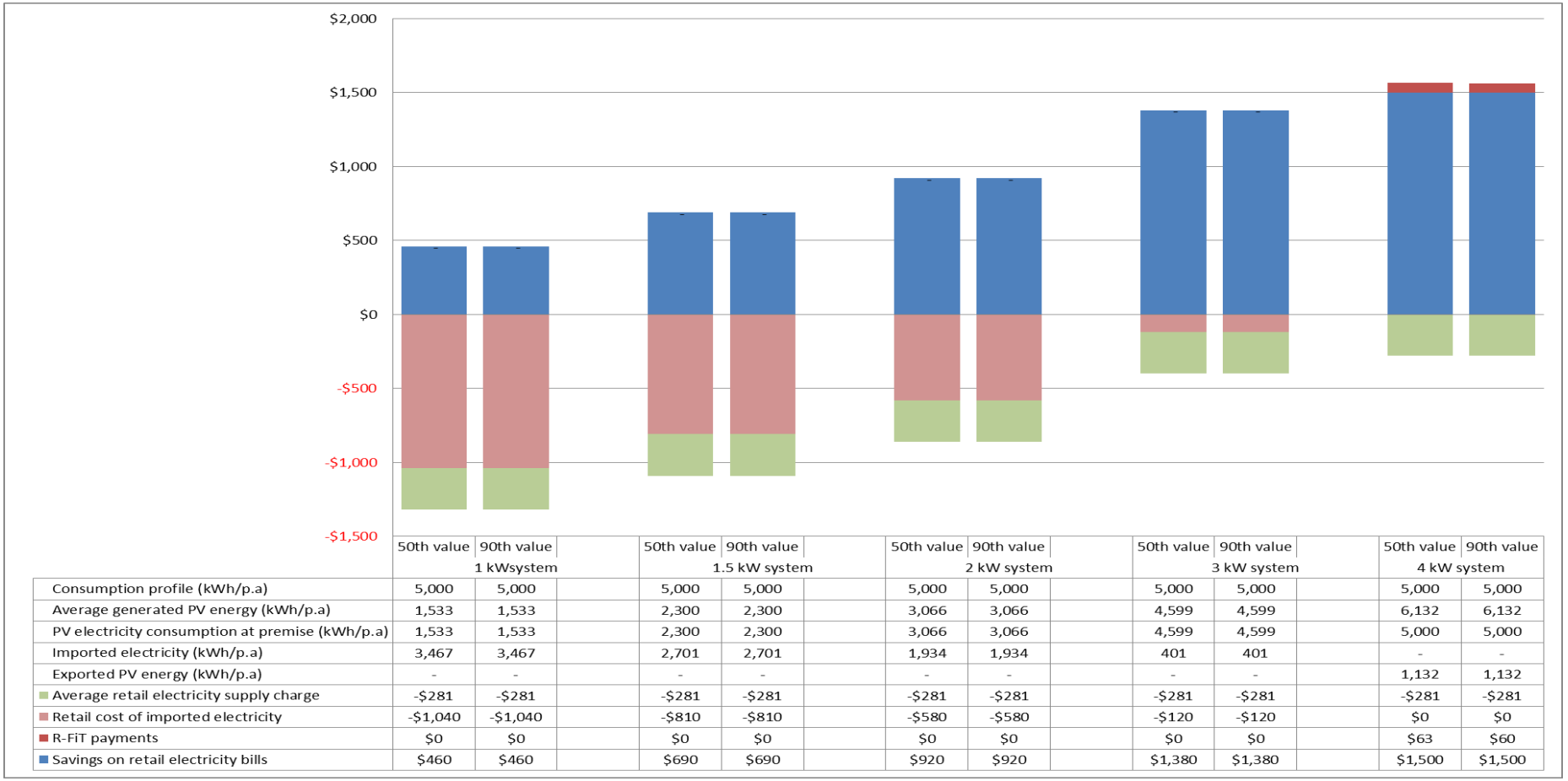
	Low	Medium	High		Low	Medium	High		Low	Medium	High		Low	Medium	High		Low	Medium	High
	1 kW system				1.5 kW system				2 kW system				3 kW system				4 kW system		
Consumption profile (kWh/p.a)	3,500	5,000	7,500		3,500	5,000	7,500		3,500	5,000	7,500		3,500	5,000	7,500		3,500	5,000	7,500
Average generated PV electricity (kWh/p.a)	1,533	1,533	1,533		2,300	2,300	2,300		3,066	3,066	3,066		4,599	4,599	4,599		6,132	6,132	6,132
PV electricity consumption at premise (kWh/p.a)	1,533	1,533	1,533		2,300	2,300	2,300		3,066	3,066	3,066		3,500	4,599	4,599		3,500	5,000	6,132
Imported electricity (kWh/p.a)	1,967	3,467	5,967		1,201	2,701	5,201		434	1,934	4,434		-	401	2,901		-	-	1,368
Exported PV electricity (kWh/p.a)	-	-	-		-	-	-		-	-	-		1,099	-	-		2,632	1,132	-
Retail cost of imported electricity	-$590	-$1,040	-$1,790		-$360	-$810	-$1,560		-$130	-$580	-$1,330		$0	-$120	-$870		$0	$0	-$410
R-FiT payments	$0	$0	$0		$0	$0	$0		$0	$0	$0		$58	$0	$0		$139	$60	$0
Savings on retail electricity bills	$460	$460	$460		$690	$690	$690		$920	$920	$920		$1,050	$1,380	$1,380		$1,050	$1,500	$1,840

Note: Average annual production capacity for different PV unit sizes is based on data published by the Clean Energy Council.[37]

[37] Clean Energy Council, *Consumer guide to buying household solar panels (photovoltaic panels)*, 19 December 2012, available at: https://www.cleanenergycouncil.org.au/technologies/solar-pv.html.

Based on an average retail electricity usage price of 30 cents/kWh, and an R-FiT value of 5.3 cents/kWh (both GST exclusive) and it is assumed that generation and consumption coincide.

Figure 5-2: Analysis of customer impact as a result of the reduction in the minimum R-FiT value



	50th value	90th value	50th value	90th value	50th value	90th value	50th value	90th value	50th value	90th value
	1 kWsystem		1.5 kW system		2 kW system		3 kW system		4 kW system	
Consumption profile (kWh/p.a)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Average generated PV energy (kWh/p.a)	1,533	1,533	2,300	2,300	3,066	3,066	4,599	4,599	6,132	6,132
PV electricity consumption at premise (kWh/p.a)	1,533	1,533	2,300	2,300	3,066	3,066	4,599	4,599	5,000	5,000
Imported electricity (kWh/p.a)	3,467	3,467	2,701	2,701	1,934	1,934	401	401	-	-
Exported PV energy (kWh/p.a)	-	-	-	-	-	-	-	-	1,132	1,132
Average retail electricity supply charge	-$281	-$281	-$281	-$281	-$281	-$281	-$281	-$281	-$281	-$281
Retail cost of imported electricity	-$1,040	-$1,040	-$810	-$810	-$580	-$580	-$120	-$120	$0	$0
R-FiT payments	$0	$0	$0	$0	$0	$0	$0	$0	$63	$60
Savings on retail electricity bills	$460	$460	$690	$690	$920	$920	$1,380	$1,380	$1,500	$1,500

Note: Average annual production capacity for different PV unit sizes is based on data published by the Clean Energy Council
Based on an average retail electricity usage price of 30 cents/kWh, and a current R-FiT value of 6.0 cents/kWh and draft R-FiT value of 5.3 cents/kWh (all figures are GST exclusive) and it is assumed that generation and consumption of electricity coincide..

6. IMPLEMENTATION OF DRAFT PRICE DETERMINATION

The Commission proposes to make a two-year Draft Price Determination, setting a *minimum* R-FiT value of 5.3 cents/kWh to apply from 1 January 2015. The R-FiT value itself is proposed to be updated annually, using a pre-determined methodology and set at the lower bound of a reasonable range of pricing outcomes. This ensures that the R-FiT reflects wholesale electricity cost movements each year and continues to provide sufficient room for electricity retailers to compete above that floor price.

As well as setting the *minimum* R-FiT value, the Draft Price Determination also proposed the implementation of a formal price-monitoring regime to allow the Commission to monitor the extent of competition of PV customers and the incidence of FiT above the mandatory *minimum* R-FiT value over the next regulatory period. Evidence provided through that process will inform the Commission's future decision as to whether or not a further price determination is required for the period beyond December 2016.

The Commission invites submissions from all members of the community on this Draft Price Determination, with submissions due on or before **30 October 2014**. All submissions will be placed on the Commission's website, subject to any confidential information being excluded.

The Commission intends to make a final decision on this issue in December 2014. If the Commission elects to make a Price Determination (whether or not on the same terms as this Draft Price Determination), then that determination will take effect from 1 January 2015.

APPENDIX 1: SUMMARY OF R-FIT SCHEMES IN OTHER JURISDICTIONS

New South Wales

In New South Wales, electricity retailers are not required to make any mandatory R-FiT equivalent payments. Under the scheme in that State, the Independent Pricing and Regulatory Tribunal (**IPART**) publishes an annual benchmark range for the R-FiT to provide guidance on the likely value of PV electricity and to assist PV customers in assessing electricity retailers' offers. IPART determined that a subsidy-free feed-in tariff is in the range of 4.9 cents/kWh to 9.3 cents/kWh for 2014/15.[38]

There are eleven retailers operating in New South Wales at the moment. AGL, EnergyAustralia and Origin Energy are the major retailers with small customer market shares of 21%, 31% and 39% in third quarter 2013-14 respectively. The remaining eight retailers have a combined market share of around 9%. [39]

The incidence and level of R-FiT payments offered to PV customers in New South Wales as at 31 July 2014 is set out in Table 6-1.[40] Of the eleven electricity retailers operating in New South Wales:

- three retailers made no voluntary R-FiT payments
- eight retailers made voluntary R-FiT payments and, of those:
    - six retailers were making payments within IPART's recommended benchmark range, and two retailers (Click Energy and Sanctuary Energy) were making payments which were above the benchmark range.
    - AGL and EnergyAustralia (with a combined market share of 52%) made payments that were at the upper bound of IPART's benchmark range whereas the payment made by Origin Energy was at the lower bound of the benchmark range.
    - Among the smaller retailers, only Powerdirect was making a voluntary payment that was at the upper bound of the benchmark range.

[38] Independent Pricing and Regulatory Tribunal, *Solar feed-in tariffs: The subsidy-free value of electricity from small-scale solar PV units from 1 July 2014 – Final Report*, June 2014; available at http://www.ipart.nsw.gov.au/Home/Industries/Electricity/Reviews/Retail_Pricing/Solar_feed-in_tariffs_201415/16_Jun_2014_-_Final_Report/Final_Report_-_Solar_feed-in_tariffs_-_The_subsidy-free_value_of_electricity_from_small-scale_solar_PV_units_from_1_July_2014.

[39] Market share data has been sourced from the Australian Energy Regulator. AER provided market share data individually for three major retailers and aggregate market share for all other retailers.

[40] The figures in Table 6-1 were sourced from the EnergyMadeEasy website, excludes GST and includes all conditional and non-conditional discounts for a typical residential customer residing in the Ausgrid distribution zone and who consumes 5,000 kWh per annum (excluding off-peak and green energy).

- Table 6-1 also shows that six of the eight electricity retailers making voluntary R-FiT payments were making their best-priced generally available Market Offers available to PV customers. It should be noted that retailers who are offering an R-FiT premium closer to the upper bound of IPART's recommended benchmark range and higher were not making their best priced offer available to PV customers, with the exception of Sanctuary Energy. However, Sanctuary Energy's best priced market offer was the most expensive of all of the best-priced Market Offers.
- On the face of it, it would appear that electricity retailers in New South Wales are actively competing for PV customers, since several retailers are either making R-FiT payments above or at the upper bound of IPART's recommended range. However, a closer analysis shows that those retailers were not making their best-priced Market Offers available to PV customers. This would suggest that those electricity retailers may be subsidising the higher R-FiT payments by offering more expensive Market Offers to PV customers.
- Table 6-1 also indicates that electricity retailers who were making R-FiT payments at the lower bound of IPART's benchmark range or not making any R-FiT payments were making their best priced offers available to PV customers. Although New South Wales' largest electricity retailer, Origin Energy (holding a market share of 39%), was making an R-FiT payment that was in the lower end of IPART's benchmark range, it was making its best-priced Market Offer available to PV customers.

Table 6-1: Price based comparison of residential electricity offers in New South Wales (as at July 2014) (GST exclusive)

	BEST-PRICED MARKET OFFER			BEST-PRICED MARKET OFFER FOR PV CUSTOMERS			
	Product Name	**Estimated Annual Cost**	**Available to PV Customers?**	**Product Name**	**Estimated Annual Cost**	**R-FIT (cents/kWh)**	**Difference in cost between contracts**
AGL	Select 13% New South Wales residential electricity market offer	$1,363	×	Advantage 7% New South Wales residential electricity market offer	$1,466	8	$104
Click Energy	Click Platinum -17% direct –debit only pay-on-time discount, monthly billing, no exit fees - Any Time Tariff - Domestic	$1,324	×	Click Shine - 10 cent Click-funded FIT, 7% pay-on-time discount, monthly billing, no exit fees - Any Time Tariff - Domestic	$1,484	10	$160
Dodo Power and Gas	Ausgrid Res No Term Market Offer (E2EAR-MAT1)	$1,330	✓	Ausgrid Res No Term Market Offer (E2EAR-MAT1)	$1,330	N/A	$0
EnergyAustralia	Flexi Saver Home - Peak Only (Online)	$1,356	×	Everyday Saver Home - Peak Only (Online)	$1,471	7.7	$115
Lumo Energy	Lumo Advantage	$1,320	✓	Lumo Advantage	$1,320	5.5	$0
Momentum Energy	Momentum SmilePower GD(Anytime)	$1,416	✓	Momentum SmilePower GD(Anytime)	$1,416	N/A	$0
Origin Energy	eSaver up to 12% off electricity usage discount (Single Rate)	$1,371	✓	eSaver up to 8% electricity usage discount (Single Rate)	$1,371	6	$0
Powerdirect	Powerdirect 13% New South Wales residential electricity market offer	$1,425	×	Powerdirect 7% New South Wales residential electricity market offer	$1,505	7.7	$80
QEnergy	Home Your Way Single Rate	$1,428	×	N/A	N/A	N/A	$0
Red Energy	Living Energy Saver - Residential	$1,250	✓	Living Energy Saver - Residential	$1,250	5	$0
Sanctuary Energy	Brightway Electricity Offer	$1,956	✓	Brightway Electricity Offer	$1,956	30	$0

Queensland

At present in Queensland there is no mandatory R-FiT equivalent regime (although there is a now-closed D-FiT equivalent regime).

The incidence and level of R-FiT payments offered to PV customers in Queensland at 31 July 2014 is set out in Table 6-2.[41] It shows that six out of thirteen electricity retailers were making voluntary R-FiT payments, but only three of those retailers were making their best-priced Market Offers available to PV customers. Five other electricity retailers in Queensland, DoDo Power and Gas, Diamond Energy, Integral Energy, QEnergy and Simply Energy, were not featured on the Queensland Competition Authority's Price Comparator tool.

Evidence of competition for PV customers in Queensland remains mixed. On the one hand, electricity retailers are competing for PV customers by making voluntary R-FiT payments in the absence of a regulatory obligation to do so. On the other hand, pricing information sourced from the QCA's Price Comparator tool seems to suggest that the R-FiT payments on offer converged to a common value.

A final matter to note is that the Queensland Government has committed to provide ongoing access to a regulated R-FiT for regional Queensland PV customers on the basis that there remains insufficient competition in regional Queensland. In a report to the Queensland Government, the Queensland Competition Authority recommended that an R-FiT value of 6.5 cents/kWh should apply in regional Queensland from 1 July 2014.[42]

Other Queensland PV customers, will need to approach the electricity retail market to secure a competitive R-FiT.

[41] The figures in Table 6-2 were sourced from Price Comparator tool operated by the Queensland Competition Authority, excludes GST and includes all conditional and non-conditional discounts for a typical residential customer consuming 5,000 kWh per annum (excluding off-peak).

[42] Queensland Competition Authority, *Solar feed-in tariff for regional Queensland for 2014-15, Final Report*, May 2014; available at http://www.qca.org.au/getattachment/14240544-981d-43b6-9181-72d4617e522e/Final-Report-Feed-in-tariff-for-regional-Queenslan.aspx.

Table 6-2: Price based comparison of residential electricity offers in Queensland (as at July 2014) (GST exclusive)

	BEST-PRICED MARKET OFFER			BEST-PRICED MARKET OFFER FOR PV CUSTOMERS			
	Product Name	**Estimated Annual Cost**	**Available to PV Customers?**	**Product Name**	**Estimated Annual Cost**	**R-FIT (cents/kWh)**	**Difference in cost between contracts**
AGL	Select 5	$1,606	×	Advantage	$1,705	8	$98
Click Energy	Click Shine Budget Monthly	$1,522	✓	Click Shine Budget Monthly	$1,522	6	$0
EnergyAustralia	Flexi Saver- Home (online offer)	$1,565	×	Everyday Saver- Home	$1,621	6	-$56
Lumo Energy	Lumo Advantage	$1,494	✓	Lumo Advantage	$1,494	6	$0
Origin Energy	eSaver	$1,593	✓	eSaver	$1,593	6	$0
Powerdirect	Powerdirect 10% discount	$1,565	×	Powerdirect Solar	$1,705	6	$140

Victoria

All electricity retailers in Victoria are required to offer a minimum R-FiT of 8 cents/kWh for 2014, many to 6.2 cent/kWh for 2015 as determined by the Essential Services Commission of Victoria.

The Victorian R-FiT does not need to be applied to every offer and electricity retailers have the discretion to offer different terms and conditions; however, if an offer (Market or Standing) is open to PV customers, an electricity retailer must pay a minimum FiT premium of 8 cents/kWh to those customers (as is the case in South Australia).

The incidence and level of R-FiT payments offered to PV customers in Victoria is set out in Table 6-3 below.[43] As at 31 July 2014, thirteen out of eighteen electricity retailers were making voluntary R-FiT payments. Further, all thirteen retailers were making their best-priced Market Offers available to PV customers, but only 1 retailer was offering an R-FiT above the minimum value.

In Victoria, the energy retail prices have been deregulated but the government still requires the Essential Services Commission of Victoria to set a mandatory R-FiT. Unlike in other jurisdictions both PV and non-PV customers receive the best priced market offers from retailers.

[43] The figures in Table 6-3 were sourced from price comparator tool Your Choice operated by the Victorian Government, excludes GST and includes all conditional and non-conditional discounts for a typical residential customer consuming 5,000 kWh per annum (excluding off-peak and green energy).

Table 6-3: Price based comparison of residential electricity offers in Victoria (as at July 2014) (GST exclusive)

	BEST-PRICED MARKET OFFER			BEST-PRICED MARKET OFFER FOR PV CUSTOMERS			
	Product Name	**Estimated Annual Cost**	**Available to PV Customers?**	**Product Name**	**Estimated Annual Cost**	**R-FIT (cents/kWh)**	**Difference in cost between contracts**
AGL	Advantage 15% Victoria residential electricity market offer	$1,391	✓	Advantage 15% Victoria residential electricity market offer	$1,391	8	$0
Alinta Energy	Standing offer	$1,455	✓	Standing offer	$1,455	8	$0
Click Energy	Click Shine- Monthly billing, no exit fees-Peak Only	$1,418	✓	Click Shine- Monthly billing, no exit fees-Peak Only	$1,418	10	$0
Commander Power and gas	Citipower Commander Residential Offer (Single Rate) (CE3CPR-MAT1 + PF1/TF1/GF1)	$1,309	✓	Citipower Commander Residential Offer (Single Rate) (CE3CPR-MAT1 + PF1/TF1/GF1)	$1,309	8	$0
Diamond Energy	N/A	N/A	N/A	Diamond Solar	$1,264	8	$0
Dodo Power & Gas	Citipower Res No Term Market Offer(Common Form Flex Plan & General FIT) (E3CPR-MCFP1GF1)	$1,255	✓	Citipower Res No Term Market Offer(Common Form Flex Plan & General FIT) (E3CPR-MCFP1GF1)	$1,255	8	$0
EnergyAustralia	Everyday Saver Home-Peak Only	$1,264	✓	Everyday Saver Home-Peak Only	$1,264	8	$0
Momentum	Momentum SmilePower GD	$1,091	✓	Momentum SmilePower GD	$1,091	8	$0
Lumo Energy	Lumo Advantage	$1,127	✓	Lumo Advantage	$1,127	8	$0
Powershop Australia	N/A	N/A	N/A	Solar Saver	$1,273	8	$0
Origin Energy	ESaver up to 22% discount on electricity usage charges (Single Rate)	$1,209	✓	ESaver up to 22% discount on electricity usage charges (Single Rate)	$1,209	8	$0
Powerdirect	Powerdirect 26% Victoria residential electricity market offer	$1,182	✓	Powerdirect 26% Victoria residential electricity market offer	$1,182	8	$0
Simply Energy	VIC Simply Save 25 Direct Debit/eBilling (Solar)	$1,073	✓	VIC Simply Save 25 Direct Debit/eBilling (Solar)	$1,073	8	$0

The Essential Services Commission of South Australia

Level 1, 151 Pirie Street Adelaide SA 5000

GPO Box 2605 Adelaide SA 5001

T 08 8463 4444

E escosa@escosa.sa.gov.au | W www.escosa.sa.gov.au