ICRC

independent competition and regulatory commission

Final Report

Electricity Feed-in Renewable Energy Premium: Determination of Premium Rate 2011–12

Report 1 of 2011
March 2011

The Independent Competition and Regulatory Commission (the Commission) was established by the *Independent Competition and Regulatory Commission Act 1997* to determine prices for regulated industries, advise government about industry matters, advise on access to infrastructure and determine access disputes. The Commission also has responsibilities under the Act for determining competitive neutrality complaints and providing advice about other government-regulated activities. Under the *Utilities Act 2000*, the Commission also has responsibility for licensing utility services and ensuring compliance with licence conditions.

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Foreword

The Independent Competition and Regulatory Commission has been requested to provide advice to the Minister for Energy, Mr Simon Corbell MLA, on the level of the premium rate to apply under the provision of the *Electricity Feed-in (Renewable Energy Premium) Act 2008*. The Minister's request for advice is at Attachment 2.

The Electricity Feed-in Act provides for payments from electricity retailers to 'occupiers' of premises with compliant renewable (solar and wind) electricity generators installed in residential and commercial premises and connected to the electricity network. These payments are made at a price known as the 'premium rate'.

The Commission issued a report on the model to be used to determine the premium rate in March 2010. In February 2011, the Minister wrote to the Commission seeking advice regarding possible changes to the premium rate to apply from 1 July 2011. The Commission, referring to it's recommendations in its March 2010 report, advised that as there had been no significant change in the Commonwealth programs relating to renewable energy, no change in the premium rate needed to be made at this time.

On 11 March 2011, the Minister wrote to the Commission seeking additional advice on the premium rate in the context of recent relevant policy changes in the ACT and other matters impacting on the cost of installing eligible renewal energy generators.

This final report presents the Commission's recommendations on the premium rate for 2011–12 and the reasoning behind the recommendations for a change in the rate to take effect from 1 July 2011.

Paul Baxter
Senior Commissioner
March 2011

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1 Introduction

On 3 March 2011, the Commission wrote to the Minister for Energy, Simon Corbell MLA, providing advice on the premium rate for the 2011–12 financial year. This advice drew on the conclusions and recommendations that the Commission reached in its review of the premium rate in March 2010.[1] At that time, the Commission recommended that the premium rate to apply in 2011–12 should be retained for 2011–12. However, the Commission also recommended that should there be any material changes to the Commonwealth arrangements prior to 2011–12, it would be necessary for the rate to be reviewed. As there have not been material changes in the Commonwealth arrangements at this time, the Commission advised its view that the existing premium rate should be retained.

Subsequently, the Minister for Energy wrote to the Commission and asked that the Commission re-examine this advice in the light of a number of factors including the recently announced policy changes in the ACT as reflected in the *Electricity Feed-in (Renewable Energy Premium) Amendment Act 2011* (the Act), plus the long term impact of the current favourable exchange rates, and the impact of exchange rates on panel prices.

In having regard to the recently announced policy changes in the ACT as reflected in the Act, the Commission has understood these to be:

- the decision to create a new category of generator under the feed-in tariff arrangements, namely a medium-scale generator having an installed capacity in the range of 30kW to 200kW
- the decision to formally cap the total eligible generation output of the two generator categories, namely the Micro (being primarily household based) and the new Medium category
- the decision to create a new class of eligible participant under the feed-in tariff arrangements, namely not-for-profit community organisations.

Under the amended legislation, the Government is now also able to vary the cap as it applies to the different categories of generators.

[1] *Electricity Feed-in Renewable Energy Premium: Determination of Premium Rate*, ICRC Report 4, March 2010

2 Key issues and principles

In its final report on the premium rate released in March 2010, the Commission identified several key issues which it considered pertinent to any future decision on the rate. The application of these ‘key issues’ to a consideration of recent policy changes and the current and likely future cost of installing solar generation facilities of the type supported through the feed-in tariff, provides a useful basis upon which to bring recommendations on the premium rate to the Minister. Each of these key issues is discussed briefly below.

2.1 Flexibility

Flexibility in setting the premium rate allows up-to-date information to be considered when setting this rate. The Commission notes however that there is a need to balance the need for flexibility with the desire shown by customers and the renewables industry for certainty in the setting of the pricing signals for solar energy systems. Nevertheless, the Commission notes that there have been some significant developments in the cost of installing solar energy panels. Primarily the experience over the last 12 months has been one of significant decline in the prices for solar panels with resultant reductions in the cost of these facilities being installed on homes and in other locations in the ACT.

This reduction in prices in the ACT has in part been as a result of the strengthening of the Australian dollar over the last 12 months. There has also been the potential impact of the decision taken by the NSW Government to reduce the feed-in tariff rate in that state with the resultant surplus of panel supplies from NSW being transferred to other jurisdictions. The Commission has made some general inquiries regarding the impact on the availability and pricing of solar panels following the changes in the NSW policy. Our investigations indicate that there has been a significant price reduction for panels and their installation across Australia and that this cannot attributed to events in NSW. The possible reasons for this will be discussed further below. Moreover, it does not appear that the ACT has necessarily ‘benefitted’ from any flow-on impact on prices as a result of the NSW decision by comparison to prices in other jurisdictions. Indeed, there is some evidence to suggest that the prices in the ACT may be a little higher than in other jurisdictions, although this is not conclusively demonstrated by the available data.

Based on the latest available installed panel prices for different size systems and using the generation capacity sizes included in Table 9 of our March 2010 Report, the Commission’s calculations indicate that the rate of return for all installed size capacity units has increased over the last 12 months as a result of the fall in installation costs. As a consequence, the payback period on installed facilities has effectively been reduced by between 25 and 50% over the last 12 months.

Thus, there may need to be some greater flexibility in the premium rate given these changes that have occurred. At the implied high rates of return currently available as a result of the reduction in installation costs, it is feasible that the caps that have been introduced on Micro generating facilities in particular could be achieved much quicker than had previous been anticipated, thereby creating a ‘boom and bust’ type scenario for the local installation industry. However, the Commission also needs to have regard to the likely continuation of the current cost reductions, and whether prices may be at artificially low levels at this time of a relatively strong exchange value. There is also a need to consider the impact on system costs of changes in the Commonwealth’s Small Scale Technology Certificates (STCs) - previously referred to as Renewable Energy

Certificates, or RECs - which will effectively reduce the subsidy benefit on solar panels with the greater impact falling on the smaller sized capacity installations.

2.2 Certainty

Certainty has been addressed from two perspectives - the methodology and principles applied in determining the premium rate, and the continuity of the level of the premium rate.

For the purposes of preparing this advice, the Commission has adopted the same model as previously used to provide the Minister for Energy advice on the premium rate. This model considers factors such as installation costs of solar panels, the Commonwealth support programs designed to encourage the take up of alternative energy generation, the size of panels and systems likely to be adopted by customers with feed-in tariff systems, the cost of annual maintenance of the systems, and the Commonwealth bond rate comparator for assessing the relative rate of return on different sized systems. Thus, 'certainty' has been maintained in terms of the methodology used to prepare this advice and the adoption of the comparator rate of return.

In terms of the level of the premium rate over time, the adoption of an annual review process provides 'certainty' for the rate at least over the year to which it is applied. In the advice given by the Commission in 2010, it was suggested that the premium rate recommended at that time should remain unchanged for the 2011–12 year unless there were 'material changes to Commonwealth arrangements prior to 2011–12'. The rationale advanced by the Commission for this view at that time was concern that significant fluctuations in the premium rate may result in customers having little confidence in the scheme and thus could result in possible speculation on the rate such that a 'boom and bust' cycle in the installation of these systems could occur. The Commission has already noted in advertisements and articles in the local press, speculation that the rate may change from 1 July 2011, and thus potential participants in the scheme should act quickly to avoid any adjustment in the rate (presumably anticipating a reduction in the rate).[2]

Therefore, notwithstanding that the Government gave a commitment to the current premium rate for a two-year period including 2011–12[3], there appears to be some expectation in the community that the rate may be changed. Furthermore, notwithstanding that the Commission has noted that there has only been minimal change in the Commonwealth arrangements, the current request for advice from the Minister directs the Commission to consider matters relating to legislative changes in the ACT plus changes in the cost of installing solar panels over the last 12 months, matters which are not directly related to changes in the Commonwealth arrangements relating to alternate energy generation.

Thus, while certainty is a desirable attribute of the premium rate, there may be circumstances in which a change in the premium rate is warranted. Such a change will not affect investment decisions already taken and implemented as the premium rate continues for a guaranteed 20-year period at the level set at the time the feed-in tariff facility commences operation having been installed and connected.

However, it will potentially raise concern regarding the commitment to the current rate previously given by the Government notwithstanding that some circumstances have changed over the last 12 months.

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[2] Canberra Times, Relax magazine, 13 March 2011, p11
[3] Minister Corbell, press statement, 1 April 2010

2.3 Simplicity and transparency

The Commission has sought to apply the principle of simplicity and transparency in the model that it has used to derive the premium rate. This model is outlined in the Commission's report of March 2010 on this matter. The same model has been applied in providing this advice. However, changes have been made to some of the inputs to the model to reflect the reduction in installation costs for solar panels, and the changes in the Commonwealth's Solar Credit multiplier.[4] The Commission has also included the payment of 100% of the premium rate for systems above 15 kW reflecting the decision of the Government in 2010 to remove the previous cap of 80% of the premium rate which had applied to these systems.

2.4 Feedback loops

In its 2010 report, the Commission, acknowledged the desirability for some form of 'feedback loop' to help inform decisions on the premium rate. The Commission noted that such feedback could be used to make adjustments to the premium rate so as to better address the objectives of the feed-in tariff program. The Commission also noted that 'the difficulty with implementing such feedback loops on an annual basis is that they introduce a much larger element of uncertainty into the decision-making process'.[5]

The advice now being sought directs the Commission to changes in policy and costs over the last 12 months. This form of feedback is an integral part of the premium rate determination process that the Commission endorsed. However, it must also be considered in the context of other key issues, not the least of which is certainty.

2.5 Degression

The 'degression' approach to setting the premium rate has been adopted by some other countries, and reflects an acknowledgement that as the cost of solar panels and their installation declines with improved manufacturing and greater economies of scale, and their overall efficiency improves with greater R&D and innovation in design, the level of the premium rate may also decline and still provide an appropriate incentive for customers to install feed-in tariff systems. The Commission in 2010 noted examples of costs reductions being experienced in other countries, and noted that such reductions would be a feature of the solar panel supply and installation industry in Australia.

The Commission has examined the current quoted prices for the installation of solar panels having various generation capacities. The Commission has also considered the impact of the change in the Commonwealth's STC multipliers and has applied these to its estimate of the cost to the customer of installing solar panel with different generation capacity. Table 1 below compares the initial investment cost used in its 2010 advice[6] with the current net investment costs. The Commission has interrogated a number of internet sites and contacted various suppliers operating in the ACT to

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[4] This change which takes effect from 1 July 2011, reduces the number of Small Scale Technology Certificates (STCs) from a five times multiplier to a four times multiplier for the first 1.5 KW of installed capacity. The multiplier then phases down by 'one' each year thereafter.

[5] ICRC March 2010, p56

[6] Taken from Table 9 of the Commission's 2010 report.

derive the installation costs. The existing REC provisions have been applied to allow comparison of costs under current conditions.

While there is some variation between the costs currently quoted, Table 1 highlights the reduction in costs over the last 12 months. As noted above, this may in part be in response to a strengthening of the Australian dollar exchange rate, or could be as a result of other factors including the change in the policy on the feed-in tariff scheme in NSW. In its 2010 report, the Commission noted UK research which suggested that reductions in the cost of solar systems could be expected to occur at a rate of around 5% per annum. By comparison, the reduction in these initial investment costs in the ACT has been around 45% for the smaller 1.5kW capacity systems and 25% for 5 kW systems over the last 12 months.

Table 1 Solar Panel Net Investment Cost

	Installation size				
	1.5 kW	2.5 kW	5 kW	15 kW	30 kW
Net investment after RECs 2010	3,463	10,348	25,494	85,119	175,037
Net investment after RECs 2011	1,897	7,012	19,055	69,298	143,128

Average prices from available suppliers. Allowance has been made for the current REC provisions effective until 30 June 2011.

It must therefore be asked whether these reductions are a result of factors that may not be repeated in subsequent years and indeed may be reversed, or whether the reductions in costs represent a permanent downward shift in the cost of these systems. If the former, the possibility that the current cost of these systems is but a lower spike in an otherwise relative slow moving downward degression of prices could mean that prices will rise in subsequent years. In these circumstances, setting the premium rate based on the current lower cost of solar panel systems could require an increase in the premium rate in future years in order to ensure that investment in these systems remains attractive.

However, if the current observed cost of these systems is in fact the new benchmark and sustainable in the future, then the continuation of a premium rate which is based on installation prices significantly higher than currently applies would be inefficient and welfare distorting.

Reference has been made to the strengthening of the Australian dollar along with other domestic factors as the cause of the significant reduction in costs for installing these systems. The NSW policy change on feed-in tariff arrangements has been identified as a possible important factor affecting prices offered in the ACT. To address this issue, the Commission has examined costs for solar systems in various jurisdictions across Australia and has found that the reductions in quoted prices in the ACT are consistent with reductions in other states. Furthermore, the prices for comparable systems between states do not reflect a significant difference. Rather, the prices in the ACT are a little higher than those in other states, although this varies from supplier to supplier. However, there is no indication that the ACT has particularly benefitted from a surfeit of supplies of panels from NSW suppliers and as such, that this factor can explain the price reductions over the past 12 months.

The Commission has also examined the movement in prices for solar panels and associated equipment internationally. Notwithstanding the strengthening of the Australian dollar over the past year, prices for this equipment internationally has fallen significantly with reports from the larger international manufacturers and suppliers quoting global market prices falling by 40 to 50% in the last two years[7]. Chinese manufacturers of solar panels are now the world's largest suppliers and are building on this base to dominate the market internationally. Spain has also been a source of cheaper panels and equipment as the industry in that country has sought to reposition itself following a number of years of reliance on domestic subsidies to supply the Spanish market. International securities analysts and investments advisers are predicting that the oversupply of solar panels will continue at least throughout 2011[8]. The flow-on effect to suppliers in other countries, particularly Germany which has established a strong quality image, has been seen in the reduced prices being quoted in Australia.

On the information available, it is evident that the high Australian dollar value has not been the principal cause of the lower prices for solar equipment in this country. While it is not possible to predict just how prices might behave over the next 12 months, the strong move by Chinese manufacturers into this market and the continuing structural adjustment of the European market following changes in feed-in tariff schemes in a number of EU countries[9] has resulted in an oversupplied market and strong competition between suppliers to maintain market share and profitability. The Australian (and ACT) market effectively benefits from this outcome which in fact is a much faster form of cost degression than could have been predicted a year ago.

Thus, while over time there will be a gradual return to a more balanced supply and demand for solar panels worldwide, this is not anticipated to occur during the current calendar year. Nor is it expected to result in a return to the higher prices for relevant solar systems that were experienced as recently as 12 months ago.

The Commission has also considered the impact of the changes to the Commonwealth's STC scheme. The reduction in the multipliers to apply to solar energy panels through a mechanism that gives a subsidy benefit for the first 1.5kW of system capacity will effectively mean that the cost of the smaller systems will increase slightly in 2011–12 assuming no further reduction in imported equipment prices occurs. Appendix A identifies the anticipated net initial investment costs for 2011–12 at these reduced subsidy rates. The Commonwealth has announced that it will continue to reduce the multiplier applied to the STCs when calculating the subsidy benefit, and over the next four years these subsidies will be gradually removed. The Commission has had regard to these adjustments to the Commonwealth's program in assessing the possible adjustment to the premium rate.

2.6 Independent verification

Identified by the Commission as a key issue, the independent verification of the premium rate is in fact the process that this advice is intended to address, and thus this objective is met in terms of the Commission's consideration and advice on what change if any in the premium rate is appropriate for the 2011–12 year.

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7 Statement from leading Japanese producer, Kyocera Corp, reported by asahi.com, 4 March 2011.
8 Bloomberg .com/news, 12 March 2011
9 The most recent being on 14 March 2011 when the UK Government announced significant changes to its feed-in tariff program which was only introduced in April 2010.

3 Discussion of issues

The Commission has been asked to consider a number of issues including the changes as reflected in the Act, and the current favourable exchange rates and impact of same on panel prices.

Addressing the issue of the current panel prices, and the impact of the current favourable exchange rate, as noted above, the Commission is of the view that while the strengthening of the Australian dollar has contributed to the reduction in prices for installed panels, this has not been the principal reason for the reductions that have been seen over the last 12 months. The fall in international prices has been passed through to prices for solar equipment delivered in Australia and this has been evident in the size of reductions in ‘equipment only’ quoted prices separate from installation quoted charges. Notwithstanding the relatively high Australian dollar value, the Australian dollar would need to depreciate by around 25% against the Euro or 20% against the Chinese Renminbi to see exchange rates return to 2009-10 levels. Given the world economic outlook and particularly Australia’s strong resource and energy base and international pressure for the Renminbi to be revalued, this appears to be highly unlikely within the next 12 to 18 months. Thus, the Commission is of the view that there is little likelihood that solar system prices, especially for the smaller units favoured by householder, will return to the levels seen in 2009-10 as a consequence of a fall in the Australian dollar value or as a result of an upward shift in international prices for this equipment.

The changes to the Act and the associated policy decision taken by the Government essentially focus upon:

- the creation of a new category under the feed-in tariff arrangements (Medium scale generation) with installed capacity of 30kW to 200kW
- the capping of the total eligible generation for the Micro and Medium category suppliers
- the creation of a new class of eligible participant, namely not-for-profit community organisations.

The implications of these changes in terms of the setting of the premium rate are that:

- the primarily ‘household’ participant section of the market will be focussed upon systems in the sub 30kW capacity range (although not precluded from entry into the Medium scale category)
- the new category of eligible participant (that is, Medium -scale generation) will need to consider a different pricing model to that which applies to a household participant, particularly in terms of where the solar panels might be installed and operated and the associated costs
- the capping of the scheme places a limit on the installed capacity under the scheme, although there is the opportunity for variation in the cap levels subject to the take up of the scheme within particular categories and the total installed capacity remaining within an overall cap set under the policy.

Currently, the provisions of the Act allow the Minister to determine the rate at which the premium rate tariff will apply to Medium scale generation. The Act specifies 75% of the determined premium rate, but the Minister may vary this percentage.

In its 2010 advice, the Commission was charged with examining and advising on a range of system installation sizes. The focus was predominantly on household-based systems, although the Commission did have regard to larger systems which could potentially be installed on commercial buildings and multi-storey residential buildings.

The Commission's 2010 advice was based primarily on a 5kW system and gave a return of around 6% per annum with a payback period of 12 years. The return was broadly equivalent to the long term government bond rate. Applying the same criteria in 2011–12 would imply a premium rate of 39 cents per kWh. This would give a rate of return of 6% and a payback period of 11 years. For the smaller systems (noting that the average system size is around 2kW), the return would be higher (at 14% for 1.5kW and 8% for 2.5kW systems) and the payback period would be 7 to 10 years (see Attachment A). This again is broadly similar to the outcomes using the cost estimates in 2010 when the rate of 45.7 cents per kWh was determined.

The implication is that a reduction in the premium rate for 2011–12 to 39 cents per kWh would still provide a reasonable return and recovery of costs for households, and an incentive for households to invest in solar feed-in electricity generating systems. Continuation of the current 45.7 cents per kWh premium rate for these participants in the scheme would significantly advantage new entrants who are now paying (and projected to continue to pay) much lower prices for solar panel systems than in 2010.

Should it be decided to continue to pay the higher 45.7 cent premium rate in 2011–12, the uptake of new installations, although potentially constricted by the ability of the electricity distributor to connect the systems and the technical regulator to certify the connection, could be expected to proceed at a rapid pace. As noted previously, there is already public advice being given to potential customers by the installation industry that interested participants should act quickly in order to have their systems installed under the particularly favourable premium rate that currently applies. This could result in the newly introduced installed capacity cap being reached much sooner than possibly anticipated. While there is some flexibility in the administration of the cap, this could only be altered at the expense of the cap applying to other category systems now provided for under the Government's policy for the feed-in tariff.

The Commission's modelling at 39 cents per kWh indicates a rate of return for the larger 15kW and 30kW system of around 6% per annum and a payback period of 11 to 12 years. Again, this is broadly similar to the model outcome previous reported in 2010 and used as the basis for the advice given at that time for a 45.7 cents per kWh premium rate. It was noted at that time that commercial businesses likely to take up the opportunity to position solar panels on their premises (such as retailing establishments with large roof space) would possibly be less interested in the overall return on their investment as the opportunity to demonstrate solar energy systems and the potential to supply such systems.

In the course of 2011–12, the price of these systems has fallen to a point where the rate of return at the 45.7 cents per kWh rate is much more attractive commercially than previously modelled. To reduce the rate to 39 cents per kWh would return the rate of return and payback period to the levels previously determined as part of the advice given in 2010.

The modelling undertaken by the Commission has been premised on the assumption that the land or building on which the solar facility is located essentially does not have a cost to the scheme's participant. This clearly is appropriate for households, and even to some extent, for commercial buildings where the roof space may be regarded as a 'free good' for purposes of installing a solar generating facility. However, with the introduction of the Medium category and the creation of a new class of eligible participant, namely not-for-profit organisations, it is more likely that the location for the solar generating facilities will not be ‘free’. Furthermore, it is likely that there will be costs associated with the management and operation of the system, not the least of which would be security and administrative tasks, which have not been included in the Commission’s modelling.

The Act provides that the feed-in tariff to be paid for electricity generated by this group will be some predetermined percentage of the premium rate. Unless otherwise determined by the Minister, the Act states that the rate to be paid will be 75% of the premium rate. However, the inclusion of these additional costs, even should the full premium rate be paid at a level of 45.7 cents per kWh, could not be assumed to cover the additional costs that apply to the Medium category (with generating systems of up to 200kW capacity) or to the not-for-profit organisations.

Thus, it may be necessary to consider the need for a separate feed-in tariff price for these producers. This however would be a substantial change to the Scheme as it would result in a multiplicity of feed-in tariff rates to be applied in the ACT depending upon the nature of the participant and size of the generating capacity. This would further complicate the process for the electricity retail industry that must maintain records and make appropriate payments over a 20-year period for these different groups. Furthermore, it could create a perception that electricity consumers are being required to pay a higher rate to compensate electricity generation which is being produced by supposedly more efficient larger solar facilities.

This problem is not fully resolved by allowing the premium rate to remain at 45.7 cents per kWh. The Commission has had representations made to it that at this rate it is not financially viable for a not-for-profit organisation to establish a solar facility and fully recover its costs including the initial investment and operating costs (including the cost of the site for the solar facility and administrative costs). This argument has not been fully tested, but does serve to highlight the issues that are likely to arise as various groups seek to take up the opportunities that have been provided by the policy changes recently announced in the ACT.

4 Conclusion and recommendation

The premium rate recommended by the Commission and adopted by the Minister in 2010 was based on a model which ensured that participants with smaller feed-in tariff systems (up to 5kW capacity) were capable of earning a return on their investment over time commensurate with the risk free government bond rate. Since that advice and determination, the price of solar panels and associated systems has fallen much quicker than anticipated.[10] This has primarily been as a result of increased productive capacity in China and Europe. All indications are that this increased supply capacity is permanent.

Notwithstanding that the exchange rate has improved in Australia's favour over the last 12 months, there would need to be a significant depreciation of the Australian dollar to remove the cost savings that have been available over the past year. The Commission's view is that it is highly unlikely that a devaluation of the Australia dollar of this magnitude will occur in the next 12 months, and even if there is a gradual depreciation of the dollar (which seems unlikely given current world events), this is unlikely to remove all the cost saving benefits that have resulted from the strong competition in the world's market for solar energy equipment.

Based on these lower costs for the supply and installation of solar panel and associated equipment, and after making allowance for minor changes in the Commonwealth's STC scheme multipliers, the Commission's modelling indicates that a premium rate of 39 cents per kWh would give a rate of return and payback period broadly equivalent to that which applied when advice was given in 2010 in favour of the current 45.7 cents per kWh rate. Adoption of the 39 cents per kWh rate would not impact on participants who had been connected prior to 1 July 2011 who would continue to be entitled to the current 45.7 cents premium rate. At the same time, participants who were connected on or after 1 July 2011 would still be receiving a return on their investment that 12 months ago was regarded as being appropriate for then new participants in the feed-in tariff scheme.

However, a reduction in the premium rate would potentially have implications for the new class of participants, namely not-for-profit organisations who, at this lower rate, would not necessarily be able to recover all the costs associated with establishing and operating a solar energy facility in circumstances where they would need to meet costs that a household participants under the scheme would not need to meet. Also, there are potential issues for the larger Medium category of participants in the scheme who would be primarily focussing upon much larger systems (30kW to 200kW capacity), but would also need to meet costs that would otherwise be regarded as 'free goods' for a household feed-in tariff generator.

In recognition of the key issues enunciated by the Commission, a reduction in the premium rate to 39 cents per kWh would be the favoured outcome. It would apply the principle of degression in the premium rate to reflect changes in the cost of installing the equipment, although at a somewhat faster rate than had been anticipated. The basis of the adjustment to the premium rate is transparent and the process has been independently undertaken by the Commission. Also, full consideration would be given to the latest costing information provided through an appropriate 'feedback' loop on developments within the industry.

[10] The risk free Commonwealth bond rate has also fallen by around 25 basis points to 5.41%.

However, the Commission is aware of the desirability of certainty in the rate, not just for potential participants, but also for the electricity retailing sector which will need to administer different rates for different customers under the scheme. Unfortunately, the administrative issues are not something that can be readily resolved by retaining the existing 45.7 cents rate. As already noted, there will be a need to address the issue of the rate to be paid for Medium category suppliers and possible for the not-for-profit organisations class of participant. These issues will not be resolved through a decision taken on the premium rate where it is apparent that the current rate is already in excess of what is required to meet the objectives of that part of the feed-in tariff program for which the premium rate is to be set, namely to encourage participation in the scheme primarily by households.

Therefore, notwithstanding that there has not been a material change as a result of Commonwealth arrangements, but having considered the matters raised by the Minster in his letter of 11 March 2011, the Commission recommends that the Minister declare the premium rate from 1 July 2011 be 39 cents per kWh.

Appendix 1 Comparison of rate of return - 2010 and 2011 modelled assumptions

Table 9 from 2010 Final Report

		Installation size				
		1.5 kW	2.5 kW	5 kW	15 kW	30 kW
Current premium payment levels	%	100	100	100	80	80
Initial net investment (after RECs)	$	3,463	10,348	25,494	85,119	175,037
Energy generated in year 1	kWh	2,025	3,375	6,750	21,750	43,500
Feed-in tariff received in year 1	$	925	1,542	3,085	7,952	15,904
Annual maintenance and inverter replacement costs	$	250	350	600	1,600	3,100
Payback period	years	6	10	12	15	16
Rate of return	%	16.9	8.1	6	2.7	2.5
Nominal return over 20 years	$	7,650	9,920	17,660	24,726	47,273

2011-12 Retain current 45.7 cents premium rate

		Installation size				
		1.5 kW	2.5 kW	5 kW	15 kW	30 kW
Current premium payment levels	%	100	100	100	100	100
Initial net investment (after STCs)	$	3,137	8,252	20,275	70,448	144,368
Energy generated in year 1	kWh	2,025	3,375	6,750	21,750	43,500
Feed-in tariff received in year 1	$	925	1,542	3,085	9,940	19,880
Annual maintenance and inverter replacement costs	$	250	350	600	1,600	3,100
Payback period	years	5	8	9	9	10
Rate of return	%	19.0	11.6	9.2	8.9	8.6
Nominal return over 20 years	$	7,980	12,019	22,883	77,336	153,815

2011-12 Adopt 39 cents premium rate

		Installation size				
		1.5 kW	2.5 kW	5 kW	15 kW	30 kW
Current premium payment levels	%	100	100	100	100	100
Initial net investment (after STCs)	$	3,137	8,252	20,275	70,448	144,368
Energy generated in year 1	kWh	2,025	3,375	6,750	21,750	43,500
Feed-in tariff received in year 1	$	789	1,316	2,633	8,483	16,965
Annual maintenance and inverter replacement costs	$	250	350	600	1,600	3,100
Payback period	years	7	10	11	11	12
Rate of return	%	14.0	8.0	6.1	6.1	5.9
Nominal return over 20 years	$	5,391	7,704	14,253	49,528	98,199

Appendix 2 Correspondence from the Minister for Energy

Simon Corbell MLA

ATTORNEY GENERAL
MINISTER FOR THE ENVIRONMENT, CLIMATE CHANGE AND WATER
MINISTER FOR POLICE AND EMERGENCY SERVICES
MINISTER FOR ENERGY

MEMBER FOR MOLONGLO

Mr Paul Baxter
Senior Commissioner
Independent Competition and Regulatory Commission
GPO Box 296
CANBERRA CITY ACT 2601

Paul

Dear Mr ~~Baxter~~

Further to our recent meeting, I am seeking your urgent assistance in regard to the findings of your review of the 2011/2012 Feed-in Tariff Premium Price.

I am seeking your further consideration in light of a number of factors including the recently announced policy changes as reflected in the *Electricity Feed-in (Renewable Energy Premium) Amendment Act 2011* (the Act); and the long term impact of the current favourable exchange rates; the impact of same on panel prices.

The Act obliges me to announce the new Premium Prices no later than 1 April 2011. I am further obliged to distribute your advice to members of the Legislative Assembly two weeks prior to that date (17 March 2011). I request your earliest response to this referral.

Yours sincerely

Simon Corbell MLA
Minister for Energy

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ACT LEGISLATIVE ASSEMBLY

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