

24/01/2018

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Dear Tim,

RE: Energy Savings Scheme Rule Change 17 -18 Consultation

Thank you for the opportunity to submit feedback on the proposed changes to the NSW Energy Savings Scheme (ESS) Rule Change 2017-2018. Accredited Power Saver Company commends the continued effort and ongoing initiative taken by the NSW government to continue to introduce beneficial updates to the ESS scheme.

Accredited Power Saver is a wholly owned Australian company that procures and installs high quality energy saving lighting products. We are a leading supplier of low power lighting products to residential sector in Victoria under the Victorian Energy Efficiency Target scheme, having installed more than 1 million lamps in more than 50,000 homes. In August 2017, Accredited Power Saver Company was approved by IPART as an ACP in the NSW ESS and in January 2018 initiated operations using the Home Energy Efficiency Retrofit (HEER) method.

Accredited Power Saver has successfully delivered energy efficiency technologies, in particular lighting upgrades to residential and business sectors with the support of the Victorian Energy Efficiency Target (VEET) scheme from 2012. Through our history and experiences we have established demonstrated expertise and familiarity with the subtleties and complexities of working within the boundaries of legislation, doing so compliantly, and communicating scheme mechanics/benefits/opportunities effectively to our staff, households and businesses. We maintain that our past experiences also position us well to provide valued advice to the NSW Government on areas to improve the ESS scheme and have we taken the opportunity to do so as part of ESS Rule changes in 2015 and 2016.

We understand that this 2017/18 ESS Rule change review is a “minor” one with a limited scope and number of specific items that the Department is seeking feedback on. We have provided our responses to a selection of the direct questions presented by the Department as part of this consultation in the **Attachment B** to this letter.

In addition to our responses to the consultations questions we will also take the opportunity in Attachment A to continue to advocate for changes to the E1 lighting activity under the HEER and specifically:

- **Allow a lighting product's rated lifetime value to contribute to the determination of its ESS Energy Saving** – the current ESS rule that applies a constant of 15 years for Lifetime does not encourage installation of the suite of high efficiency products now available. The currently successful products installed in the VEET scheme have rated lifetimes of 40,000-50,000 hours.
- **Establish savings factor “bands” for residential lighting products in E1** – Products with high efficacy and long lifetimes are increasingly available, or are able to be developed, but this higher quality comes at a cost. It is important to recognise and reward higher quality. Higher performing products that carry higher Electricity Savings Factors will more likely be installed over poor quality product; leading to greater customer satisfaction and persistence of savings.

We also take the opportunity now to support Energy Mad's two key recommendations to create sufficient financial incentives from ESCs for whole home lighting retrofits to become viable at scale, including:

- Set the Activity Definition E11 Electricity Savings Factors for incandescent and halogen lamps to 0.53MWh per general purpose incandescent or halogen lamp replaced in Residential Buildings; and 1.05MWh per general purpose incandescent or halogen lamp replaced in Small Business Buildings.
- Remove the requirement for Activity Definition E11 and Activity Definition E3 lamp replacement installations to be performed or supervised by a licensed electrician.

Accredited Power Saver Company consider the annual review an important and welcome mechanism that will improve business certainty as well as provide a valuable opportunity for ongoing dialog with the Department, OEH, and IPART on ESS matters. We are prepared to provide appropriate time and resources as requested to support the Department's continuing efforts to improve the ESS scheme. Should you have any questions regarding this submission, please contact me or the Managing Director Andrew McLeod at andrew@accreditedpower.com.au.

Kind regards,

Henry Otley

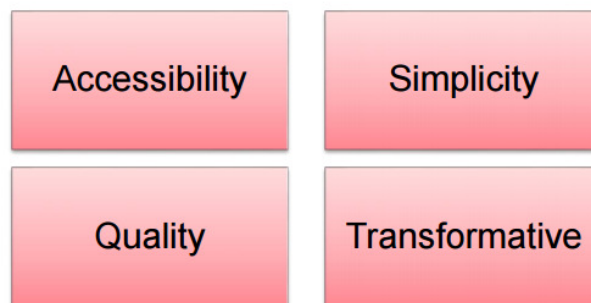
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Attachment A – Improve abatement for category E1 products

This section includes topics we have previously advocated for ESS Rule change from Accredited Power Saver Company and Embertec Pty Ltd. We understand that 2017-18 Rule change is not a “major” review year and that the Department is not seeking explicit comment regarding lighting energy savings factors but we maintain the view that it is still a critical and important area for change that will unlock dramatic levels of lighting upgrades for residential and small business in NSW.

Commentary

Lighting is a crucial gateway activity to increased awareness and delivery of tangible benefits of energy efficiency to the residential sector. It is the low cost/high value opportunity that is most often cited in general conversation about home energy efficiency. Lighting upgrades are also the most tangible opportunity to introduce energy efficiency value to those that don’t understand it well. Of all the deemed activities available to household and SMEs under the ESS, efficient lighting is the one that can be delivered at scale. Accredited Power Saver is confident that appropriate updates to the ESS Rules to improve the deemed lighting activity can be done simply and meet the core Rule change principles previously set out by the NSW Government below.



The lifetime benefits that LED lighting upgrades, specifically the replacement of halogen downlights can provide are well understood and can drive a transformative reduction in energy use to NSW as it is already doing in Victorian through the support of the VEET scheme.

Table 1 – Comparison of lighting upgrades in Victoria (VEET) and NSW (ESS) as at Dec 2016

	VIC	NSW
Occupied homes	1,944,000	2,471,299
Owner occupied	1,362,000	1,644,000

Rented	582,000	827,299
Assumed proportion of homes w/ downlights	60%	60%
Total opportunity (for owner occupied)	817,200	986,400
Homes transitioned to LED downlights (through EE program)	≈370,000	≈130
Proportion of eligible homes with LED downlights	45%	≈ 0%
Delivered annual \$ savings from LEDs (assume \$85/annum/home)	\$31,450,000	\$11,050
\$ savings over 10 years for households (assume \$850/home)	\$310,450,000	\$110,500
NOTE: a 10 year savings is very conservative for products that will typically last more than 30,000 hours and will not include inevitable year on year retail electricity price rises		

We view the genuinely low product lifetime Electrical Savings Factor values attached to LED downlight retrofits simply does not offer a compelling proposition for the consumer without the support of ESC prices near penalty rates. The NSW Government highlighted in the 2015 consultation paper as an \$850 savings over \$10 years for simply replacing 10 halogen downlights with LED products. Frustratingly, despite certificate prices recently trending higher and our business now actively participating as an ACP, there continues to be uncertainty and risk with long term participation in the ESS. We have the capacity and proven capabilities to deliver energy efficiency at scale and drive the energy efficiency conversation and education to NSW households and small business but energy savings awarded to lighting upgrades using the HEER continue to undervalue “high quality long life products”.

Solution: better reward high quality long lasting lighting replacements

The manner in which ‘Activity Definition for E1’ establishes and applies energy savings factors results in a situation where the ESS benefit does not align with the actual product performance and is ultimately too low to make the incentive attractive. Through the current approach there is no incentive to source and/or offer higher quality and longer lasting products to households. In fact it provides a perverse incentive that penalises the high quality products

by applying a comparably “low” deemed lifetime and encourages ACPs who are prepared to provide the lowest possible quality.

We recommend that the NSW Government move to an energy saving calculation approach similar to that used in the VEET scheme that categorises and classifies the energy savings for different LED products using the key lamp attributes of efficacy and lifetime as opposed to lamp circuit power and a globally applied value of 15 years (which was improved in 2016 from 10 to 15 years) for lifetime. The VEET approach aligns the savings factor with the actual energy savings delivered over the lifetime of the LED product. It also encourages the installation of higher quality products, without setting minimum standards which make the category uneconomical to service.

While Greenhouse Gas savings attributed to lighting retrofits in Victoria compared with NSW do vary, the actual electricity savings should not be materially different, yet for some reason the actual electricity savings figures do vary materially between the two state schemes.

The ideal solution in our view (which would also tick a boxes in the commitment to “align” EE schemes) would be **for NSW to pick up and use the VEET abatement factors from its 21C, 21D and 21E activities**. To adapt the VEET requirements to the NSW format we propose the scheme move to energy savings matrix similar to the Table 2. Table 2, if adopted, would provide expanded categorisation rewarding desirable product attributes ultimately to the benefit of higher quality, longer life LED retrofits in homes and SMEs.

Table 2 – Proposed revised Energy Savings Factor table E1 – replace halogen downlight with efficient luminaire and/or lamp

Activity Energy Savings
<i>Deemed Activity Electricity Savings = Savings Factor</i>
Where:
<ul style="list-style-type: none"> <i>Savings Factor</i>, in MWh, is the value from Table E1.1 corresponding to the existing Lamp or Luminaire where the Efficacy of the replacement Lamp being installed (in Lm/Watts); and <i>Lamp Efficacy Circuit Power</i> is the Efficacy Circuit Power of the replacement Lamp and Driver being installed (in Lm/Watt)
Table E1.1 Savings Factors (MWh per Lamp replaced)

Existing Lamp and/or Luminaire	New Lamp and/or Luminaire	Rated life of new lamp (hrs)	Energy Savings Factor			
			New lamp efficacy (Lm/W)			
			Minimum Efficacy	High Efficacy 1	High Efficacy 2	High Efficacy 3
Tungsten halogen Lamp (ELV) with Electronic Transformer or Infrared coated (IRC) halogen Lamp (ELV) with Electronic Transformer with or without Luminaire.	LED Lamp and Driver or LED Luminaire recessed	20,000 to 25,000				
		25,000 to <30,000				
		30,000+				
	LED Lamp only - ELV	20,000 to 25,000				
		25,000 to <30,000				
		30,000+				
Tungsten halogen Lamp (ELV) with Magnetic Transformer or Infrared coated (IRC) halogen Lamp (ELV) with Magnetic Transformer., with or without Luminaire.	LED Lamp and Driver or LED Luminaire - recessed	20,000 to 25,000				
		25,000 to <30,000				
		30,000+				
Tungsten halogen Lamp (ELV) with Electronic Transformer, or Infrared coated (IRC) halogen Lamp (ELV) with	LED Lamp only – 240V Self Ballasted	20,000 to 25,000				
		25,000 to <30,000				

Electronic Transformer., with or without Luminaire.		30,000+				
Tungsten halogen Lamp (ELV) with Magnetic Transformer, or Infrared coated (IRC) halogen Lamp (ELV) with Magnetic Transformer, with or without Luminaire	LED Lamp only – 240V Self Ballasted	20,000 to 25,000				
		25,000 to <30,000				
		30,000+				
Tungsten halogen Lamp (240V)), with or without Luminaire	LED Lamp only – 240V Self Ballasted or LED Luminaire - recessed	20,000 to 25,000				
		25,000 to <30,000				
		30,000+				

Administrative framework underpinning ESS Rules should deliver positive customer experiences

Important changes to the ESS Rule have progressed over the previous two years in support of improving the HEER method and in particular the lighting categories including:

- Eliminating the requirement to have minimum activities from both activity D and E;
- Eliminating the requirement to complete a full energy efficiency home assessment audit;
- Reduction of the co-payment requirement from \$90 to \$30; and
- Supporting direct 'Lamp only' replacements in place of halogen downlights with magnetic and electronic transformers.

As detailed in the previous section, options remain to improve the HEER method, in particular the energy saving factor for products in the E1 category. However, it cannot be understated how welcome the changes over the past couple of years are. Now that Accredited Power Saver is operational as an ACP in NSW and now that we are experiencing first-hand the business realities and increased costs of maintaining compliance within the boundaries of both the ESS Rule legislation (OEH) and ESS scheme administration (IPART). There are a number of recent examples we can provide where the administrative requirements in place are not working well for ACPs (especially small ACPs) and in our view:

- Add significant operational costs to RESA delivery at no clear benefit;
- Introduce significant cash flow risks; and
- Undermine efforts to promote the benefits of the ESS scheme and deliver positive customer experience.

We appreciate that IPART as the scheme administrator is ultimately responsible for designing the administrative framework that ACPs operate under and to establish a compliance framework that is robust and which will ensure long-term integrity of the scheme is not compromised. Through their accreditation processes, product approval processes, record requirements, and audit regime they have done a solid job and should by and large be commended. To that end there are instances where the Rule and administrative requirements do not work to support each other well and in collaborative manner. Further, in our brief on-the-ground experience delivering our RESA we have experienced real instances where the ESS administration and compliance requirements have resulted in our representatives subjecting households to genuinely poor experiences that simultaneously introduce risks to their own safety.

Our specific administrative concerns are principally for us to raise to and work with IPART to address, which we will do. However, positive experiences for customers and safety of all representatives delivering RESAs is paramount to quality outcomes, high public perception, and scheme integrity and no doubt an important consideration of the Department when developing and or amending Rules. As part of your on-going dialog with ACPs, if you are not already doing so, we encourage the Department to engage with participants regarding operational aspects of their RESA delivery that are beyond the scope of what is included in the Rules and where prudent work with IPART to drive **appropriate** changes to administration requirements that support the ESS Rule without compromising integrity.

We look forward to dialog with the Department regarding our operational experiences and its assistance to help champion administrative changes.

Attachment B – Responses to Energy Savings Scheme Rule Change 17-18 Consultation Paper December 2017

Below is Accredited Power Saver responses to a selection of questions that were included as part of the Rule change consultation paper.

Question 1: Do you agree with the proposal to preserve preceding transitional arrangements within the Rule? If not, please provide an alternative approach and supporting evidence to justify your response.

Accredited Power Saver supports this proposal and agrees that it should increase transparency for stakeholders.

Question 2: Do you agree with the intention to collect additional customer data, including NMI and DPI? If not, please provide an alternative approach and supporting evidence to justify your response

In general, yes Accredited Power Saver support the concept but it is not completely clear how the Department intends to use the NMI and DPI to access the data. NMI and DPI alone does not provide data without some sort of consent from the customer – getting that consent might be an issue and having to explain what an NMI/DPI to a customer (especially a residential customer) will increase delivery costs for ACPs.

Question 3: Do you agree with the proposal that ACPs are required to ensure that the LED lights installed under the PIAM&V method meet the relevant equipment requirements outlined in the ESS Rule? If not, please provide an alternative approach and supporting evidence to justify your response.

We agree that it is prudent to maintain consistency across the different methodologies and that would include lighting equipment requirements.

Question 6: Do you agree with the proposal that ACPs are required to ensure that the LED lights installed under the Metered Baseline Method meet the relevant equipment requirements outlined in the ESS Rule? If not, please provide an alternative approach and supporting evidence to justify your response.

As communicated in our response to question 3, we agree that it is prudent to maintain consistency across the different methodologies and that would include lighting equipment requirements.

Question 8: Do you agree with the proposed Asset Lifetime values? If not, please provide an alternative approach and supporting evidence to justify your response.

Question 9: Do you agree with the proposed transition period? If not, please provide an alternative approach and supporting evidence to justify your response.

Question 10: Do you consider that the proposed Asset Lifetime values should be rounded to the nearest year, or that that the proposal for portions of years is more appropriate?

For questions 8, 9, 10 we don't really have an opinion about this. The approach seems reasonable but it does lend our business to have some reservations that the Department may introduce this methodology and approach immediately to the HEER method. The Department should refrain from introducing a similar approach to the HEER method in the immediate 3 year future until such time as there is a much better understanding and additional NSW ESS specific data that can be used as justification for a change.

Question 11: Do you agree that a Maximum NLP cap should be applied to all types of HID high-bay lamps, or do you think it should only be applied to specific technology types of high bay lamps? Please provide supporting evidence to justify your response.

Question 12: Do you have any comments on the proposed maximum NLP cap?

For questions 11 and 12, again we don't really have a view as we do not intend to participate in commercial lighting or install high bays however we view that introducing maximum NLPs has a dangerous precedent of significantly under rewarding some genuine upgrades. Couldn't the desired outcomes be established administratively by evidence requirements established by IPART?

Question 13: Do you agree with the inclusion of a sub-clause for Maintained Emergency Lighting? If not, please provide an alternative approach and supporting evidence to justify your response.

The change appears reasonable

Question 16: Do you agree with allowing BCA Class 3 buildings to become eligible sites under the HEER and ROOA sub-method? If not, please provide an alternative approach and supporting evidence to justify your response.

Yes, this would be a welcome change that could expand the opportunity to deliver upgrades to small business. Still problematic however, is the requirement in the Rules limiting small business upgrades to spaces that are less than 200 square meters. For an ACP, the limitation adds significant costs to customer acquisition and upgrade delivery because there is no explicit guidance defining what is included and/or excluded in a 200m² space (ie. working area, storage space, outside store fronts). Also, even if the definition of what is included or excluded is improved it is still not always straightforward process to ask for or collect (through measurement) evidence that supports floor area size.

Finally, 200m² seems like quite an arbitrary value anyway, yet it is explicit in the Rules to not allow for any discretion to deviate above it. The intent behind creating a space limitation is understood but not always fit for purpose, what happens to a small shop that has a heavy lighting and/or air conditioning costs but the shop is 205m² – they can't benefit. It would be good to add language in the Rules that could allow some common sense approach to establish what an eligible small business space includes.

We understand that this is an issue that the Department is investigating and an issue we look forward to engaging on going forward.

Question 25: Please provide any comment on the proposed table of BCA Climate Zones by postcode.

Nice addition to the Rules

Question 26: Do you have any interest in becoming accredited to undertake pool pump replacements using the HEER method? Why/why not?

Potentially but it is not a core competency of our business so we would need to undertake much more due diligence on the viability of expanding our offerings to pool pump replacements prior to seeking accreditation.

Question 29: Do you have any interest in a new activity for ventilators under the ESS? If not, please provide further explanation and supporting evidence to justify your response.

Potentially but like pool pumps, it is not a core competency of our business so we would need to undertake much more due diligence on the viability of expanding our offerings to pool pump replacements prior to seeking accreditation.