

RESIDENTIAL ENERGY EFFICIENCY SCHEME CODE (REES CODE) – PROPOSED AMENDMENTS

Draft Decision

November 2013



REQUEST FOR SUBMISSIONS

The Essential Services Commission of SA (**the Commission**) invites written submissions from members of the community on this paper. Written comments should be provided by **13 December 2013**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is the 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:

Residential Energy Efficiency Scheme Code (REES Code) – Proposed Amendments
- Draft Decision

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The Essential Services Commission of South Australia is the independent economic regulator of the electricity, gas, ports, rail and water 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*. For more information, please visit www.escosa.sa.gov.au.

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GLOSSARY OF TERMS

AV	Audio Visual
CFL	Compact Fluorescent Lamps
COMMISSION	Essential Services Commission of South Australia, established under the Essential Services Commission Act 2002
DEEMING VALUES	Carbon dioxide equivalents (in tonnes) to be attributed to a specific approved energy efficiency activity
ELECTRICITY ACT	<i>Electricity Act 1996 (SA)</i>
ELECTRICITY REGULATIONS	<i>Electricity (General) Regulations 2012 (SA)</i>
ESC ACT	<i>Essential Services Commission Act 2002</i>
ESCV	Victorian Essential Services Commission
GAS ACT	<i>Gas Act 1997 (SA)</i>
GAS REGULATIONS	<i>Gas Regulations 2012 (SA)</i>
IT	Information Technology
LED	Light Emitting Diode
LUMINOUS FLUX	Measure of the perceived power of light. The standard unit of luminous flux is the lumen
MINISTER	The Minister responsible for the administration of the Electricity Act 1996 (SA) and/or the Gas Act 1997 (SA)
MINISTERIAL PROTOCOL	Residential Energy Efficiency Scheme (REES) Protocol set by the Minister for Energy, November 2008
NERL RETAILERS	The holder of a retailer authorisation under the National Energy Retail Law or an exempt seller within the meaning of the National Energy Retail Law
REES	Residential Energy Efficiency Scheme
REES CODE	Refer http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-regulatory-documents.aspx
REES OBLIGED RETAILERS	Refer http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-obliged-retailers.aspx
REGULATIONS	Part 4 of the <i>Electricity (General) Regulations 2012</i> and Part 4 of the <i>Gas Regulations 2012</i>
SCHEME	Refer to REES
SPC	Standby Power Controller
T CO₂-E	Tonnes of carbon dioxide equivalent
VEET	Victorian Energy Efficiency Target Scheme, promoted as the Energy Saver Incentive

1. INTRODUCTION

The Essential Services Commission of South Australia (**Commission**) is established under the Essential Services Commission Act 2002 (**ESC Act**), as the independent economic regulator of essential services in South Australia. The primary objective of the Commission 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 within both the electricity and gas industries is to administer the Residential Energy Efficiency Scheme (**REES**). That scheme was established by the South Australian Government in 2008 and commenced on 1 January 2009.

REES requires energy retailers with more than 5,000 residential customers to provide energy audits and energy efficiency activities to South Australian households in accordance with Ministerial targets set. All energy audits and 35% of greenhouse gas reductions are required to be delivered to priority group households, consistent with one of the Government's stated policy objectives of assisting low-income consumers.

REES is given statutory effect through Parts 4 of the Electricity (General) Regulations 2012 and Gas Regulations 2012 (the **Regulations**).

1.1 Background

The Residential Energy Efficiency Scheme Code (**REES Code**) commenced in January 2009 as an industry code¹ and is binding on energy retailers operating in South Australia.

The REES Code establishes requirements in relation to the conduct and operations of energy retailers in satisfaction of their REES obligations, including:

- the allocation and notification of, and obligation to achieve, energy audit targets, greenhouse gas reduction targets and priority group greenhouse gas reduction targets;
- record-keeping and reporting obligations (including data integrity assurance mechanisms) in relation to energy audit targets, greenhouse gas reduction targets and priority group greenhouse gas reduction targets; and
- compliance and audit obligations (including provisions for Annual Compliance Plans) in relation to energy audit targets, greenhouse gas reduction targets and priority group greenhouse gas reduction targets.

National Energy Retail Law energy retailers (**NERL retailers**) are required to comply with the REES Code pursuant to section 63AB(1)(a) of the Electricity Act 1996 (**Electricity Act**). Similar provisions exist under the Gas Act 1997 (**Gas Act**).

The Commission makes an annual public call for applications for new REES activities, including applications to vary or delete existing activities. Any changes to existing activities and additions of new activities are incorporated into a REES Code review. The annual call for

¹ Pursuant to the powers of the Commission under section 28 of the ESC Act.

applications was made in March 2013, and it was the Commission's decision not to adopt the proposed activities.²

This review of the REES Code is primarily focussed on proposals to:

- allow for more than one standby power controller (**SPC**) activity to be undertaken at a premises where the occupant has changed;
- amend the deeming values of SPCs for products only meeting minimum specifications; and
- amend the Install Efficient Extra Low Voltage Down Lights to allow lamp retrofits approved by the Commission.

The Commission has also taken this opportunity to propose other, administrative, amendments to the Code, based on its operational experiences with the Scheme to date.

1.2 Process and consultation

The Commission is publicly consulting on this Draft Decision.

Following public consultation on this REES Code Draft Decision, the Commission will release its REES Code Final Decision and final version of the amended REES Code, and is expected to come into effect from early 2014.

Details on how to make submissions on this Draft Decision and the associated regulatory document are provided on the inside cover of this paper.

² See 2013 Public Call for Applications for New REES Energy Efficiency Activities - <http://www.escosa.sa.gov.au/projects/191/2013-public-call-for-applications-for-new-rees-energy-efficiency-activities.aspx#stage-list=1>

2. DISCUSSION AND KEY ISSUES

The key proposed amendments to the REES Code are outlined in this section, incorporating some amendments to specified clauses of the REES Code.

2.1 Standby Power Controllers – Change of occupants

Background

The Commission received a number of requests during 2013 to consider permitting additional installations of SPCs in premises where it can be verified there has been a change in occupancy since the first installation. A general requirement under the REES Code is that a REES approved activity may only be performed once in residential premises, with an exception made in the case of CFLs installed from 1 January 2012 (where it was taken to be a new activity, with the emphasis being to remove halogen globes).

The proponents of this change argue that, unlike most of the REES activities, householders are likely to consider SPCs as their property to take when moving house, disadvantaging new occupiers of the premises.

The Energy Audit Minimum Specification, as published by the Minister, allows for further audits to be conducted at a premises where it can be demonstrated that the occupants of that premises have changed.³ The Commission requires an obliged retailer to:

- a) complete a declaration in relation to each audit it wishes to report to the Commission where an audit has been previously undertaken and the occupant has since changed; and
- b) obtain and retain evidence from the householder demonstrating the length of occupancy.

Proposed Decision

Based on this feedback, the Commission proposes that Schedule 4 and the individual SPC activity specifications in the REES Code be amended to allow for multiple installations of SPCs in premises where it can be verified there has been a change in occupancy since the previous installation. The Commission will determine a process under which change of occupants can be demonstrated. This process may be similar to that for change of occupants in relation to energy audits (as detailed above).

³ The Commission released a REES Bulletin in July 2013 to provide clarification on how REES obliged retailers can demonstrate this change. See - [REES Bulletin No 14 – Conduct of Energy Audits in a Household where the Occupant has Changed](#)

2.2 Standby Power Controllers – Deeming values for products only meeting minimum specifications

Background

On 6 September 2013, the Essential Services Commission of Victoria (**ESCV**) announced it was significantly reducing the deeming values it applies to installation of all eight approved SPCs for the Victorian Energy Efficiency Target (**VEET**).

ESCV adjusted the deeming values by a factor of 0.55 for Audio Visual (**AV**) SPCs and 0.62 for Information Technology (**IT**) SPCs (i.e. deeming values were nearly halved) to apply from 7 October 2013.

SPCs were added to the list of approved REES activities for the first time in January 2012. The REES Code categorises SPCs into classes according to their tonnes of carbon dioxide equivalent (**CO₂-e**) abatement potential (deeming value). The REES Code includes minimum specifications for all SPCs and specifies deeming values to apply to those basic models (Class 1A for both AV and IT SPCs). More advanced SPCs, which meet additional specifications in the Code, are assigned a higher class with a higher deeming value, based on the values determined under VEET.

Since the introduction of SPCs in 2012 REES has adopted VEET deeming values for all advanced SPCs (all SPCs except Class 1A), adjusted for by a factor of 0.9 to account for the lower emission factors used in South Australia compared to Victoria.

The Commission announced in October 2013 that the classes for approved advanced SPCs will change for the 2014 REES year, effective from 1 January 2014, to effect the changes to SPC deeming values under VEET. SPC activities undertaken prior to 1 January 2014 will retain the current deeming values, i.e., there will be no retrospective adjustment. The Commission has advised retailers of any associated class changes for approved products.

As the REES deemed value for basic SPCs is independent of VEET, they will not adjust in the same manner as advanced SPCs. Changing the deeming value to apply to SPCs that only meet the minimum performance characteristics (basic models) therefore requires a REES Code change.

The lower deeming values for advanced SPCs would mean that some advanced SPCs would have new deeming values similar to the current base case deeming value. Reducing the base case SPC deeming values by the same factors applied to advanced models will bring the base case values back to less than that for advanced models.

Proposed Decision

It is therefore proposed that the Commission will amend the deeming values for basic SPC models in the Code. This will ensure that deeming values appropriately differentiate between basic and advanced SPCs on a consistent basis.

It is also proposed to change Class 1B to relate to SPCs that achieve abatement of at least 1.0t CO₂-e (rather than 1.5) under VEET, and introduce a Class 1C category for abatement of at least 1.5t CO₂-e under VEET. Without this change some approved advanced IT SPCs would fall into the base case (as the new abatement is less than the currently required 1.5 tonnes for an advanced SPC). This ensures that all currently approved advanced SPCs receive a consistent reduction in the deeming value across all classes.

The following changes to the SPC specifications are proposed:

Table 1: Standby Power Controller AV, deemed CO₂-e saving values

Standby Power Controller Class (AV)	Current deeming value tCO₂-e	Proposed deeming value tCO₂-e
Class 1A <ul style="list-style-type: none"> Meets the minimum specification set out in item 1 	1.3	0.7
Class 1B <ul style="list-style-type: none"> Meets the minimum specification set out in item 1; and Does not operate solely on the basis of a master/slave arrangement; and Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 1.0 tonnes of carbon dioxide equivalents over a 10 year period; and Has been subjected to a field trial approved by the Essential Services Commission of Victoria. 	n/a	0.9 ⁴
Class 1C <ul style="list-style-type: none"> Meets the minimum specification set out in item 1; and Does not operate solely on the basis of a master/slave arrangement; and Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 1.5 tonnes of carbon dioxide equivalents over a 10 year period; and Has been subjected to a field trial approved by the Essential Services Commission of Victoria. 	1.4 (previously Class 1B)	1.4

⁴ VEET abatement factors are adjusted by 0.9 to reflect lower carbon intensity of electricity generation in South Australia.

Table 2: Standby Power Controller IT, deemed CO₂-e saving values

Standby Power Controller Class (IT)	Current deeming value tCO₂-e	Proposed deeming value tCO₂-e
Class 1A <ul style="list-style-type: none"> Meets the minimum specification set out in item 1 	1.0	0.6
Class 1B <ul style="list-style-type: none"> Meets the minimum specification set out in item 1; and Does not operate solely on the basis of a master/slave arrangement; and Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 1.0 tonnes of carbon dioxide equivalents over a 10 year period; and Has been subjected to a field trial approved by the Essential Services Commission of Victoria. 	n/a	0.9 ⁵
Class 1C <ul style="list-style-type: none"> Meets the minimum specification set out in item 1; and Does not operate solely on the basis of a master/slave arrangement; and Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 1.5 tonnes of carbon dioxide equivalents over a 10 year period; and Has been subjected to a field trial approved by the Essential Services Commission of Victoria. 	1.4 (previously Class 1B)	1.4

2.3 Install Efficient Extra Low Voltage Down Lights - activity amendment

Background

The REES Code includes “Install efficient extra low voltage down lights” as a REES approved activity. This activity relates to both light emitting diode (**LED**) and compact fluorescent lamp (**CFL**) low voltage down lights (replacements for halogen lights). As with all REES energy efficiency activities, the REES Code sets out specifications defining the scope and nature of products and actions which will fall within the ambit of the activity.

Specification 6 for this activity requires that “*the LED model installed shall be certified with the Lighting Council Australia SSL (Solid State Lighting) scheme*”. The intention of specification 6 is to ensure acceptable lighting quality outcomes as the Lighting Council certification includes an assessment of manufacturer’s performance claims. The Commission understands that the Lighting Council will not currently certify LED lamp-only retrofits, only complete lamp and driver installations.

⁵ VEET abatement factors are adjusted by 0.9 to reflect lower carbon intensity of electricity generation in South Australia.

An electrician is required for complete lamp and driver installation and this makes the activity, under current specification requirements, significantly more expensive than down light lamp only replacement.

As a result, no installations of LED down lights under REES have occurred to date. Payback for LEDs in high use areas is relatively good. Some retailers have expressed an interest in undertaking LED lamp-only retrofits under REES.

The main issue with LED lamp-only retrofits is compatibility with the currently installed driver and installed dimmer (if there is one). It is not possible to know how well an LED will work until the driver and dimmer is known (which would occur during installation).

Some better quality LEDs have advanced technology that can overcome some compatibility issues; however, the variety of driver and dimmer combinations make it hard to determine compatibility prior to trying the LED.

The Lighting Council has informed the Commission that is currently developing a specification for certification of lamp-only LED retrofits which is expected to be in place by the end of 2013. At this time, it is not possible to predict how many, if any, products will be certified.

The ESCV, through administration of the VEET scheme, has produced requirements and a process for approving 12v LED lamp-only replacements for halogen down lights.⁶

Proposed Decision

The Commission proposes to amend specification 6 of the Install Efficient Extra Low Voltage Down Light activity to allow the Commission to specify alternative means of LED certification that will be allowed (in addition to the Lighting Council SSL Scheme).

This would allow the Commission to issue, any time after the REES Code change takes effect, alternative means of certification/approval for LED products.

If the Commission decides to allow VEET approved LED products to be installed, these would be limited to those approved under Schedule 21C of the VEET Regulations, and which meet all the other specifications of the REES Code “install efficient extra low voltage down lights” activity. Of note is the requirement for the lamp model installed to have an average downward initial luminous flux of 500 lumens or more, verified by test report.

Should the Commission decide to approve LEDs itself, it is likely that it would only approve a limited range of compliant lamps which retailers have expressed an interest in using.

This allows the Commission flexibility in allowing LED products to be installed under REES, whilst maintaining sufficient control to ensure compatibility issues are mitigated so that good outcomes are ensured for customers.

The proposed changes to the REES activity specifications (changes highlighted in italics) are:

⁶ Refer to Schedule 21C of the Victorian Energy Efficiency Target Regulations 2008. ESCV has also produced an *Explanatory Note – Incandescent Lighting Replacement (Schedule 21) Product Approval Requirements*, which includes the minimum requirements for LED lamp only down light replacement.

Specification 6

The LED model installed shall be:

a) certified with the Lighting Council Australia SSL scheme (<http://www.lightingcouncil.com.au/ssl/overview.php>); or

b) *as otherwise approved by the Commission for installation under REES.*

Specification 10

A lamp shall not be installed or connected to a dimmer switch, timer, motion sensor, daylight switch or other automated switch or control, unless specified by the manufacturer as being compatible with such device. *If a lamp is to be connected to a dimmer switch, the installer shall test it through its full dimming range to ensure that the lamp works to the satisfaction of the customer.*

New specification

A lamp must not be installed where it would be incompatible with the operation of the transformer and dimmer switch (if applicable) currently installed. Where a replaced lamp causes the light fitting to no longer operate, the installer must either reinstall the original lamp (or an equivalent replacement) at the request of the householder, or replace any components of the light fitting that are causing the replaced lamp not to operate, at no expense to the resident. Such a request must be made within 3 months of the installation of the new lamp.

The specification changes above will put the onus on the installer to ensure consistent, quality lighting outcomes for customers to prevent expensive revisits and replacements. Retailers will need to carefully develop their roll-out installation programs, including choice of lamps, to ensure compatibility issues are mitigated as they (and their service providers) will bear the risk of poor performing lamps.

2.4 General updates

The Commission has also taken the opportunity to make a number of minor typographical/clerical updates including references to Australian Standards and legislation throughout the Code.

3. NEXT STEPS

Following the period of public consultation on this Draft Decision, the Commission will release its REES Code Final Decision and final version of the amended REES Code in early 2014.

The Commission notes that the proposed amendments to the REES Code may require retailers to undertake some system changes. Given the short time frame to apply these changes, the Commission will liaise with retailers during implementation to ensure REES Code requirements are met as soon as possible.

The Commission invites written submissions from interested parties in relation to its proposed amendments to the REES Code. Written comments should be provided by **13 December 2013**. It is highly desirable for an electronic copy of the submission to accompany any written submission. Please refer to submission instructions on the inside cover of this paper.



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