

# RESIDENTIAL ENERGY EFFICIENCY SCHEME CODE

*DRAFT REESC/07*

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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](http://www.escosa.sa.gov.au).

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# 1 PRELIMINARY

## 1.1 Authority

- 1.1.1 This Residential Energy Efficiency Scheme Code is made as an industry code pursuant to the powers of the **Commission** under section 28 of the Essential Services Commission Act 2002 (SA).

## 1.2 Definitions and Interpretation

- 1.2.1 In this Residential Energy Efficiency Scheme Code, words appearing in bold like **this** are defined in Schedule 1.
- 1.2.2 This Residential Energy Efficiency Scheme Code must be interpreted in accordance with the rules set out in Schedule 2.

## 1.3 Background

- 1.3.1 The provisions of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012 establish the **Residential Energy Efficiency Scheme**.
- 1.3.2 Each **energy retailer** is required to comply with the **Residential Energy Efficiency Scheme**.
- 1.3.3 To give effect to the **Residential Energy Efficiency Scheme**, the **Minister** must set:
- (a) the **obligation threshold**: the threshold number of **residential customers** which an **energy retailer** must have before any obligations under the **Residential Energy Efficiency Scheme** arise (an **energy retailer** whose **residential customer** numbers equal or exceed the **obligation threshold** is referred to as an “**obliged retailer**”);
  - (b) the **annual energy audit target**: the total number of **energy audits** which **obliged retailers** must cause to be undertaken in respect of any given **REES year**;
  - (c) the **annual greenhouse gas reduction target**: the total number of tonnes of carbon dioxide equivalent reduction which must be achieved by **obliged retailers** through causing **energy efficiency activities** to be undertaken in respect of any given **REES year**; and
  - (d) the percentage of the **annual greenhouse gas reduction target** which must be achieved by **obliged retailers** through causing **energy efficiency activities** to be undertaken in respect of **priority group households** in respect of any given **REES year**.

## 1.4 Powers and functions of the Commission

- 1.4.1 The **Commission** is the administrator of the **Residential Energy Efficiency Scheme** and has such functions and powers as are necessary or expedient to give effect to the **Residential Energy Efficiency Scheme** including, without limitation, the following:
- (a) administering the **Residential Energy Efficiency Scheme**;
  - (b) ensuring that **energy retailers** comply with the **Residential Energy Efficiency Scheme**;

- (c) approving new **energy efficiency activities**;
- (d) maintaining the list of approved **energy efficiency activities**; and
- (e) reporting to the **Minister** annually in relation to the operation of the **Residential Energy Efficiency Scheme**, and from time to time in relation to any other matter with respect to the **Residential Energy Efficiency Scheme**.

## 1.5 *Application of the Residential Energy Efficiency Scheme*

- 1.5.1 While all **energy retailers** are bound at all times by the provisions of the **Residential Energy Efficiency Scheme**, in respect of any given **REES year** each **obliged retailer** must:
- (a) cause sufficient **energy audits** to be undertaken in respect of **priority group households** so as to meet that **obliged retailer's** allocation of the **annual energy audit target**; and
  - (b) cause sufficient **energy efficiency activities** to be undertaken in respect of **residential premises** so as to meet that **obliged retailer's** allocation of the **annual greenhouse gas reduction target**;
  - (c) in relation to the **energy efficiency activities** referred to in clause 1.5.1(b), cause sufficient **energy efficiency activities** to be undertaken in respect of **priority group households** so as to meet that **obliged retailer's** annual allocation of the **priority group greenhouse gas reduction target**; and
  - (d) comply with the provisions of this Residential Energy Efficiency Scheme Code in relation to those obligations.

## 1.6 *This Residential Energy Efficiency Scheme Code*

- 1.6.1 **Energy retailers** are required to comply with the **Residential Energy Efficiency Scheme**.
- 1.6.2 **Energy retailers** are also required to comply with any relevant industry code made by the **Commission** from time to time, with **NERL retailers** required to comply with code provisions relating to any scheme relating to energy efficiency. This Residential Energy Efficiency Scheme Code is a relevant industry code for that purpose.
- 1.6.3 This Residential Energy Efficiency Scheme Code establishes requirements in relation to the conduct and operations of **energy retailers** in satisfaction of the **Residential Energy Efficiency Scheme** obligations, including:
- (a) the allocation and notification of, and obligation to achieve, **energy audit targets, greenhouse gas reduction targets** and **priority group greenhouse gas reduction targets**;
  - (b) record-keeping and reporting obligations in relation to **energy audit targets, greenhouse gas reduction targets** and **priority group greenhouse gas reduction targets**; and
  - (c) compliance and audit obligations in relation to **energy audit targets, greenhouse gas reduction targets** and **priority group greenhouse gas reduction targets**.



## 1.7 *Class of persons experiencing hardship*

- 1.7.1 For the purposes of the definition of **priority group household** under Regulation 23 of the Electricity (General) Regulations 2012 and Regulation 17 of the Gas Regulations 2012, the **Commission** has determined that:
- (a) **hardship program customers** are a class of persons who are experiencing hardship; and
  - (b) a **hardship program customer** is a **residential customer** who is, at the time the **energy efficiency activity** or **energy audit** is undertaken, participating in an **energy retailer's** hardship program.
- 1.7.2 For the purposes of clause 1.7.1, a retailer's hardship program must, as a minimum:
- (a) have a clearly defined entry and exit point of which the **residential customer** is advised in writing upon entering the program;
  - (b) protect the participating **residential customer** from credit collection action and disconnection;
  - (c) have a specialised team within the **energy retailer** to support participating **residential customer**;
  - (d) offer **residential customers** flexible payment arrangements that have regard to the **residential customer's** usage, capacity to pay and current financial situation; and
  - (e) provide additional support to **residential customers** through referral to third party support agencies, applicable Commonwealth and State government concessions and access to energy efficiency advice.

## 1.8 *Commencement*

- 1.8.1 This Residential Energy Efficiency Scheme Code commences on 1 January 2009.

## 2 DETERMINATION OF OBLIGED RETAILERS

### 2.1 *Obligation threshold*

- 2.1.1 In accordance with the requirements of the **Residential Energy Efficiency Scheme**, the **Minister** will set the **obligation threshold** for the purpose of allocating **energy audit targets**, **greenhouse gas reduction targets** and **priority group greenhouse gas reduction targets** for each **REES year** by notice in the South Australian Government Gazette:
- (a) in respect of an **electricity retailer**; and
  - (b) in respect of a **gas retailer**.
- 2.1.2 Each **energy retailer** which has customer numbers equalling or exceeding the **obligation threshold** as at 30 June immediately prior to the commencement of a **REES year** is an **obliged retailer** for that **REES year**.
- 2.1.3 For the avoidance of doubt, an **energy retailer** may have both electricity and gas obligations.

### 2.2 *Commission determination of obliged retailers*

- 2.2.1 On or before each 31 October immediately prior to the commencement of a **REES year**, the **Commission** will:
- (a) determine whether an **energy retailer** is to be an **obliged retailer** for that **REES year**;
  - (b) where the **Commission** determines that an **energy retailer** is to be an **obliged retailer** for that **REES year**, advise that **energy retailer** of the **Commission's** determination in writing.
- 2.2.2 In making a determination for a **REES year** under clause 2.2.1, the **Commission** will have regard to:
- (a) data reported to the **Commission** by each **energy retailer** in accordance with the requirements of this Residential Energy Efficiency Scheme Code (under clauses 5.4.3 to 5.4.5); and
  - (b) data made available to the **Commission** by **AEMO**; and
  - (c) data made available to the **Commission** by a **distributor**; and
  - (d) any other data or information which the **Commission** considers relevant,
- in relation to the number of **residential customers** which an **energy retailer** had at 30 June in the year immediately prior to the commencement of that **REES year**.

## 3 ANNUAL ENERGY AUDIT TARGET

### 3.1 *Residential Energy Efficiency Scheme annual energy audit targets*

- 3.1.1 Pursuant to the provisions of the **Residential Energy Efficiency Scheme**, the **Minister** will set **annual energy audit targets** for each **REES year** by notice in the South Australian Government Gazette. The **Commission** will publish these targets on its website.
- 3.1.2 The **Commission** is required to apportion each **annual energy audit target** amongst **obliged retailers** and **obliged retailers** are required to cause sufficient **energy audits** to be undertaken to meet their obligations.

### 3.2 *Apportionment of annual energy audit targets*

- 3.2.1 On or before each 31 October immediately prior to the commencement of a **REES year**, the **Commission** will:
  - (a) in accordance with the provisions Part 4 of the Electricity (General) Regulations 2012, calculate the **electricity energy audit target** to apply to each **obliged retailer** for that **REES year**;
  - (b) in accordance with the provisions of Part 4 of the Gas Regulations 2012, calculate the **gas energy audit target** to apply to each **obliged retailer** for that **REES year**; and
  - (c) notify each **obliged retailer** in writing of any **electricity energy audit target** and **gas energy audit target** which applies to that **obliged retailer** for that **REES year**.
- 3.2.2 In making a determination for a **REES year** under clause 3.2.1, the **Commission** will have regard to:
  - (a) data reported to the **Commission** by each **energy retailer** in accordance with the requirements of this Residential Energy Efficiency Scheme Code (under clauses 5.4.3 to 5.4.5); and
  - (b) data made available to the **Commission** by **AEMO**; and
  - (c) data made available to the **Commission** by a **distributor**; and
  - (d) any other data or information which the **Commission** considers relevant.

### 3.3 *Obligation to achieve energy audit targets*

- 3.3.1 Each **obliged retailer** in receipt of a notice issued by the **Commission** under clause 3.2.1 must cause sufficient **energy audits** to be undertaken so as to meet its **electricity energy audit target** and/or **gas energy audit target** for that **REES year**.
- 3.3.2 For the purposes of this clause 3.3, an **energy audit** will only count in satisfaction of an **obliged retailer's electricity energy audit target** or **gas energy audit target** for a **REES year** if:
  - (a) the **energy audit** was performed in accordance with the specifications set out in Schedule 3; and

- (b) the **energy audit** was undertaken by a **competent person** and that person was:
  - (i) an employee, agent or contractor of the **obliged retailer**; or
  - (ii) any other person, whether or not for fee or reward, where that person permits, by notice in writing, the **energy audit** to count in satisfaction of the **obliged retailer's electricity energy audit target** or **gas energy audit target**; and
- (c) the **obliged retailer** has ensured that the performance, reporting and compliance requirements of this Residential Energy Efficiency Scheme Code, including the consumer protection obligations outlined in chapter 8, have been complied with in respect of that **energy audit**; and
- (d) the **energy audit**:
  - (i) was performed during a **REES year**; or
  - (ii) formed part of any excess amount notified by the **Commission** under clause 3.5.1 or clause 3.5.2.

### 3.4 *Notification of energy audit target shortfalls*

- 3.4.1 If the **Commission** determines that an **obliged retailer** in receipt of a notice issued under clause 3.2.1(c) in respect of a **REES year** has failed to achieve its **electricity energy audit target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that shortfall.
- 3.4.2 If the **Commission** determines that a **obliged retailer** in receipt of a notice issued under clause 3.2.1(c) in respect of a **REES year** has failed to achieve its **gas energy audit target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that shortfall.
- 3.4.3 Subject to clause 3.4.4, each **obliged retailer** in receipt of a shortfall notice issued by the **Commission** under clause 3.4.1 or clause 3.4.2 must cause sufficient **energy audits** to be undertaken in the **REES year** immediately following the **REES year** identified in the shortfall notice so as to make good that shortfall.
- 3.4.4 Where:
  - (a) an **obliged retailer** is in receipt of a shortfall notice issued by the **Commission** under clause 3.4.1 or clause 3.4.2 and that notice states that the amount of the shortfall is more than 10 per cent of the relevant **energy audit target**; and
  - (b) the **energy retailer** is not to be an **obliged retailer** in the **REES year** immediately following the **REES year** which was the subject of the shortfall notice,
 then that **obliged retailer** must make good the shortfall.
- 3.4.5 This clause 3.4 applies in respect of an **obliged retailer** in respect of a **REES year** notwithstanding that it will not be an **obliged retailer** in relation to any subsequent **REES year**.

### 3.5 *Notification of energy audit target excess*

- 3.5.1 If the **Commission** determines that an **obliged retailer** in receipt of a notice issued under clause 3.2.1(c) in respect of a **REES year** has caused more **energy audits** to have been undertaken than would otherwise be necessary to achieve its **electricity energy audit target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that excess.
- 3.5.2 If the **Commission** determines that a **obliged retailer** in receipt of a notice issued under clause 3.2.1(c) in respect of a **REES year** has caused more **energy audits** to have been undertaken than would otherwise be necessary to achieve its **gas energy audit target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that excess.

## 4 ANNUAL GREENHOUSE GAS REDUCTION TARGET

### 4.1 *Residential Energy Efficiency Scheme annual greenhouse gas reduction targets*

- 4.1.1 Pursuant to Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012, the **Minister** will set **annual greenhouse gas reduction targets** for each **REES year** by notice in the South Australian Government Gazette. The **Commission** will publish these targets on its website.
- 4.1.2 Pursuant to Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012, the **Minister** will set a percentage of the **annual greenhouse gas reduction target** to be achieved through the provision of **energy efficiency activities** to **priority group households** for each **REES year** by notice in the South Australian Government Gazette. The **Commission** will publish these targets on its website.
- 4.1.3 The **Commission** is required to apportion each **annual greenhouse gas reduction target** amongst **obliged retailers** and **obliged retailers** are required to cause sufficient **energy efficiency activities** to be undertaken to meet their obligations.

### 4.2 *Apportionment of annual greenhouse gas reduction targets*

- 4.2.1 Subject to clause 4.2.3, on or before each 31 October immediately prior to the commencement of a **REES year**, the **Commission** will:
  - (a) in accordance with the provisions of Part 4 of the Electricity (General) Regulations 2012, calculate the **electricity greenhouse gas reduction target** and the **priority group greenhouse gas reduction target** to apply to each **obliged retailer** for that **REES year**;
  - (b) in accordance with the provisions of Part 4 of the Gas Regulations 2012, calculate the **gas greenhouse gas reduction target** and the **priority group greenhouse gas reduction target** to apply to each **obliged retailer** for that **REES year**; and
  - (c) notify each **obliged retailer** in writing of:
    - (i) any **electricity greenhouse gas reduction target** and/or **gas greenhouse gas reduction target** which applies to that **obliged retailer** for that **REES year**;
    - (ii) the percentage of any **electricity greenhouse gas reduction target** and/or **gas greenhouse gas reduction target** which the **Minister** has determined must be achieved through the provision of **energy efficiency activities** to **priority group households**; and
    - (iii) the percentage, if any, of the percentage specified for the purposes of clause 4.2.1(c)(ii) which must be achieved through the provision of **energy efficiency activities** to particular classes of **priority group households** as determined by the **Minister**.

- 4.2.2 In making a determination for a **REES year** under clause 4.2.1, the **Commission** will have regard to:
- (a) data reported to the **Commission** by each **energy retailer** in accordance with the requirements of this Residential Energy Efficiency Scheme Code (under clauses 5.4.3 to 5.4.5); and
  - (b) data made available to the **Commission** by **AEMO**; and
  - (c) data made available to the **Commission** by a **distributor**; and
  - (d) any other data or information which the **Commission** considers relevant.

### 4.3 *Obligation to achieve greenhouse gas reduction targets*

- 4.3.1 Each **obliged retailer** in receipt of a notice issued by the **Commission** under clause 4.2.1(c) must cause sufficient **energy efficiency activities** to be undertaken so as to meet its **electricity greenhouse gas reduction targets** and/or **gas greenhouse gas reduction targets** for that **REES year**.
- 4.3.2 For the purposes of this clause 4.3, an **energy efficiency activity** will only count in satisfaction of an **obliged retailer's electricity greenhouse gas reduction targets** or **gas greenhouse gas reduction targets** for a **REES year** if:
- (a) the **energy efficiency activity** was performed in accordance with the specifications set out in Schedule 4; and
  - (b) the **energy efficiency activity** was undertaken by:
    - (i) an employee, agent or contractor of the **obliged retailer**; or
    - (ii) any other person, whether or not for fee or reward, where that person permits, by notice in writing, that **energy efficiency activity** to count in satisfaction of the **obliged retailer's electricity greenhouse gas reduction target** or **gas greenhouse gas reduction target**; and
  - (c) the **obliged retailer** has ensured that the performance, reporting and compliance requirements of this Residential Energy Efficiency Scheme Code, including the consumer protection obligations outlined in chapter 8, have been complied with in respect of that **energy efficiency activity**; and
  - (d) the **energy efficiency activity**
    - (i) was performed during a **REES year**; or
    - (ii) formed part of any excess amount notified by the **Commission** under clause 4.5.1 or clause 4.5.2.

## 4.4 *Notification of greenhouse gas reduction target shortfalls*

- 4.4.1 If the **Commission** determines that an **obliged retailer** in receipt of a notice issued under clause 4.2.1(c) in respect of a **REES year** has failed to achieve its **electricity greenhouse gas reduction target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that shortfall.
- 4.4.2 If the **Commission** determines that an **obliged retailer** in receipt of a notice issued under clause 4.2.1(c) in respect of a **REES year** has failed to achieve its **gas greenhouse gas reduction target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that shortfall.
- 4.4.3 Subject to clause 4.4.4, each **obliged retailer** in receipt of a shortfall notice issued by the **Commission** under clause 4.4.1 or clause 4.4.2 must cause sufficient **energy efficiency activities** to be undertaken in the **REES year** immediately following the **REES year** identified in the shortfall notice so as to make good that shortfall.
- 4.4.4 Where:
- (a) an **obliged retailer** is in receipt of a shortfall notice issued by the **Commission** under clause 4.4.1 or clause 4.4.2 and that notice states that the amount of the shortfall is more than 10 per cent of the relevant **greenhouse gas reduction target**; and
  - (b) the **obliged retailer** is not required to comply with the **Residential Energy Efficiency Scheme** in the **REES year** immediately following the **REES year** which was the subject of the shortfall notice,
- then the **obliged retailer** must make good the shortfall.
- 4.4.5 This clause 4.4 applies in respect of an **obliged retailer** in respect of a **REES year** notwithstanding that it will not be an **obliged retailer** in relation to any subsequent **REES year**.

## 4.5 *Notification of greenhouse gas reduction target excess*

- 4.5.1 If the **Commission** determines that an **obliged retailer** in receipt of a notice issued under clause 4.2.1(c) in respect of a **REES year** has caused more **energy efficiency activities** to have been undertaken than would otherwise be necessary to achieve its **electricity greenhouse gas reduction target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that excess.
- 4.5.2 If the **Commission** determines that a **obliged retailer** in receipt of a notice issued under clause 4.2.1(c) in respect of a **REES year** has caused more **energy efficiency activities** to have been undertaken than would otherwise be necessary to achieve its **gas greenhouse gas reduction target**, then the **Commission** may, at any time, notify the **obliged retailer** in writing of the amount of that excess.



## 5 RECORD KEEPING, REPORTING AND ASSURANCE

### 5.1 *Compliance plans*

- 5.1.1 By no later than 31 March in each **REES year**, each **obliged retailer** must submit to the **Commission** a compliance plan for the **REES year** in accordance with the requirements of this clause 5.1.
- 5.1.2 A compliance plan must include at least the following matters:
- (a) a statement from the Chief Executive Officer (or other person as authorised under clause 5.5.3) of the **obliged retailer** acknowledging the obligations and responsibilities of that **obliged retailer** under the **Residential Energy Efficiency Scheme** and this Residential Energy Efficiency Scheme Code, in particular the consumer protection provisions under chapter 8, for the **REES year**;
  - (b) information about the **obliged retailer's** complaint and dispute resolution procedures in relation to **Residential Energy Efficiency Scheme**, demonstrating that the procedures:
    - (i) are established in accordance with Australian Standard ISO 10002-2006; and
    - (ii) are readily accessible to any **residential customer** that has had an **energy audit** or **energy efficiency activity** undertaken in their home;
  - (c) a description of the training provided to the **obliged retailer's** employees, contractors and/or agents in relation to the performance of **energy audits** and **energy efficiency activities**;
  - (d) a description of the systems and processes in place to ensure that persons undertaking activities in a **residential customer's** premises, where training requirements are identified in the specification for that activity (provided in Schedule 4), have fulfilled the mandatory training requirements outlined in chapter 8 of this Residential Energy Efficiency Scheme Code. The assurance that all installers have completed the required training will be provided in the Chief Executive Officer Statement required under clause 5.1.2(a);
  - (e) a description of the systems and processes in place to ensure those persons undertaking an **energy audit** or **energy efficiency activity** in a **residential customer's** premises are fit and proper;
  - (f) a description of the **obliged retailer's** internal allocation of responsibilities under the **obliged retailer's** obligations and responsibilities under the **Residential Energy Efficiency Scheme** and this Residential Energy Efficiency Scheme Code for the **REES year**; and
  - (g) a description of the resources, systems and processes which the **obliged retailer** intends to use to ensure that the **obliged retailer's** obligations and responsibilities under the **Residential Energy Efficiency Scheme** and this Residential Energy Efficiency Scheme Code will be met for the **REES year**.
- 5.1.3 An **obliged retailer** must advise the **Commission** in writing within 20 **business days** of any material changes to its compliance plan.

- 5.1.4 An **obliged retailer** must provide to the **Commission** any additional information in relation to REES compliance matters as sought by the **Commission** from time to time.

## 5.2 *Energy audit and energy efficiency activity records*

- 5.2.1 An **obliged retailer** must collect and record the information specified in Schedule 5 in relation to each **energy audit** and **energy efficiency activity** performed in respect of a **residential premises** at the time the activity is performed.

## 5.3 *Record keeping obligations*

- 5.3.1 All records maintained for the purpose of clause 5.2.1 must be:
- (a) kept within the possession or control of an **obliged retailer** for at least a period of 5 years following the expiry of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012;
  - (b) kept in a readily accessible location; and
  - (c) made available to the **Commission** or the **Energy and Water Ombudsman** upon request in a form required by the **Commission**.

## 5.4 *Reporting obligations*

- 5.4.1 An **obliged retailer** must provide the **Commission** with a **REES reporting statement** on a quarterly basis (including for nil returns).
- 5.4.2 A **REES reporting statement** must:
- (a) be submitted to the **Commission** in respect of each quarter of a **REES year** (January to March; April to June; July to September; October to December) within 20 **business days** after the end of that quarter, unless alternative timing is agreed in writing with the **Commission**;
  - (b) truthfully, accurately and verifiably represent the records maintained in accordance with clause 5.2 in relation to **energy audit** and **energy efficiency activities** which the **obliged retailer** has caused to be undertaken in respect of that quarter;
  - (c) comply with the data manner and form requirements specified in Schedule 8; and
  - (d) contain a responsibility statement in accordance with the requirements of clause 5.5.
- 5.4.3 For the purposes of determining obligations and the setting of individual **obliged retailer** targets for a **REES year**, **energy retailers** must provide the **Commission** with the following statistical information concerning the operations of the **energy retailer**:
- (a) the total number of **residential customers** within South Australia to whom the **energy retailer** sold electricity as at the final day of the financial year preceding a **REES year**;
  - (b) the total number of **residential customers** within South Australia to whom the **energy retailer** sold gas as at the final day of the financial year preceding a **REES year**;

- (c) the total electricity sales to **residential customers** within South Australia by the **energy retailer** in the financial year preceding a **REES year**, expressed in megawatt hours (MWh); and
  - (d) the total gas sales to **residential customers** within South Australia by the **energy retailer** in the financial year preceding a **REES year**, expressed in gigajoules (GJ).
- 5.4.4 For the avoidance of doubt, the reporting requirements outlined in clause 5.4.3:
  - (a) apply to all **energy retailers** (including **NERL retailers**) and are not limited to **obliged retailers**; and
  - (b) the sales data required under clause 5.4.3(c) and 5.4.3(d) for the financial year 2012/13 must be the aggregate of sales made by the **energy retailer** whilst licenced under the Electricity Act 1996 (SA) and Gas Act 1997 (SA) and whilst a **NERL retailer**.
- 5.4.5 The information required under clause 5.4.3 must be:
  - (a) provided in accordance and in the form specified in Schedule 9;
  - (b) signed and dated by the Chief Executive Officer (or other person as authorised under clause 5.5.3) of the **energy retailer**; and
  - (c) provided to the **Commission** no later than 31 August of the year preceding a **REES year**.

## 5.5 *REES responsibility statement*

- 5.5.1 A **REES responsibility statement** must be in the form specified in Schedule 6.
- 5.5.2 A **REES responsibility statement** for a quarter other than a quarter ending 31 December must be signed and dated by:
  - (a) the Chief Executive Officer of the **obliged retailer**; or
  - (b) a person holding an equivalent position to Chief Executive Officer of the **obliged retailer**; or
  - (c) a person holding a delegation from the **obliged retailer** to exercise the powers and functions of the **obliged retailer** at a level equivalent to that held by a Chief Executive Officer; or
  - (d) the person acting as Chief Executive Officer or equivalent position during an absence of the substantive officeholder; or
  - (e) a senior officer of the **obliged retailer**, as agreed with the **Commission**.
- 5.5.3 A **REES responsibility statement** for a quarter ending 31 December must be signed and dated by:
  - (a) the Chief Executive Officer of the **obliged retailer**; or
  - (b) a person holding an equivalent position to Chief Executive Officer of the **obliged retailer**; or
  - (c) a person delegated to exercise the powers and functions of the **obliged retailer** at a level equivalent to that held by a Chief Executive Officer; or

- (d) the person acting as Chief Executive Officer or equivalent position during an absence of the substantive officeholder.

## 5.6 *Substance to prevail over legal form*

- 5.6.1 A **REES reporting statement** must report the substance of transactions and events.
- 5.6.2 Where substance and legal form differ, the substance rather than the legal form of a transaction or event must be reported.
- 5.6.3 In determining the substance of a transaction or event, all its aspects and implications will be considered, including the expectations of, and motivations for, the transaction or event.
- 5.6.4 For the purposes of determining the substance of a transaction or event, a group or series of transactions or events that achieves, or is designed to achieve, an **energy audit** or an **energy efficiency activity** will be viewed in aggregate.

## 5.7 *Information provided must be verifiable*

- 5.7.1 **Obligated retailers** must maintain reporting arrangements which enable information provided in a **REES reporting statement** to be verified.

## 5.8 *Materiality*

- 5.8.1 All reports provided to the **Commission** by an **obliged retailer** must accurately set out all material matters.
- 5.8.2 The **Commission** will apply the following standard of **materiality**:
  - (a) an item is **material** if its omission, misstatement or non-disclosure has the potential to prejudice the understanding of the **energy audit** and **energy efficiency activities** undertaken by the **obliged retailer**;
  - (b) the **materiality** of an individual item, or aggregate of items, will depend upon both the size and nature of the omission, misstatement or non-disclosure having regard to the particular circumstances;
  - (c) the assessment of **materiality** shall consider qualitative as well as quantitative factors; and
  - (d) qualitative factors which impact on the **materiality** of an item, including:
    - (i) the significance of an item to the **Commission** in its administration of the **Residential Energy Efficiency Scheme**;
    - (ii) the pervasiveness of a misstatement; and
    - (iii) the effect of misstatement on the **REES reporting statement** as a whole.

## 5.9 *Quality assurance requirements*

- 5.9.1 The **Commission** may require an **obliged retailer** to:
  - (a) undertake an audit of its operations in relation to, and its compliance with its obligations under, the **Residential Energy Efficiency Scheme**, in

accordance with the requirements of Energy Industry Guideline No. 4 issued by the **Commission** (as amended from time to time);

- (b) report to the **Commission** the results of audits conducted for the purpose of this clause 5.9.1, in a manner approved by the **Commission**; and
- (c) use an independent expert approved by the **Commission** to conduct audits under this clause 5.9.1.

5.9.2 When independent assurance is required by the **Commission** for the purposes of this clause 5.9, it must be consistent with the requirements of Energy Industry Guideline No. 4 - Compliance Systems and Reporting.

## 5.10 *Field Audits*

5.10.1 From time to time, the **Commission** may require an **obliged retailer** to conduct field audits for **energy efficiency activities** and **energy audits** it conducted in order to meet the retailer's obligations.

5.10.2 The **Commission** will notify the **obliged retailer** in writing of this requirement and advise the **obliged retailer** the specifications of the field audit, the number of audits to be conducted and the timeframe for completion (which is to be no less than 28 days).

## 6 ASSESSMENT OF PERFORMANCE

### 6.1 *Commission assessment of quarterly achievement*

- 6.1.1 Upon receipt of a **REES reporting statement** submitted in accordance with the requirements of clause 5.4.2 for a quarter other than a quarter ending on 31 December, the **Commission** will, based on the information then available to it:
- (a) assess the extent to which the **energy audits** reported in that **REES reporting statement** contribute towards the satisfaction of the **obliged retailer's energy audit target**; and
  - (b) assess the extent to which the **energy efficiency activities** reported in that **REES reporting statement** contribute towards the satisfaction of the **obliged retailer's greenhouse gas reduction target**.
- 6.1.2 The **Commission** will advise the **obliged retailer** in writing of the **Commission's** assessments under clause 6.1.1 within 10 **business days** of the assessments being made.
- 6.1.3 An assessment under this clause 6 does not constitute a determination of a **Residential Energy Efficiency Scheme** annual target achievement for the purposes of this Residential Energy Efficiency Scheme Code.

### 6.2 *Commission determination of annual target achievement*

- 6.2.1 Upon receipt of a **REES reporting statement** submitted in accordance with the requirements of clause 5.4.2 for a quarter ending on 31 December, the **Commission** will, based on the information then available to it:
- (a) determine the extent to which the **energy audits** reported in that **REES reporting statement** contribute towards the satisfaction of the **obliged retailer's energy audit target**;
  - (b) determine the extent to which the **energy efficiency activities** reported in that **REES reporting statement** contribute towards the satisfaction of the **obliged retailer's greenhouse gas reduction target**; and
  - (c) determine whether the **obliged retailer** has satisfied its **energy audit target** or **greenhouse gas reduction target** (as the case may be) for that **REES year**.
- 6.2.2 The **Commission** will advise the **obliged retailer** in writing of the **Commission's** determinations under clause 6.2.1 within 10 **business days** of the determinations being made.

### 6.3 *Information subsequent*

- 6.3.1 Where the **Commission** becomes aware of information which demonstrates (to the **Commission's** satisfaction) that a determination made under clause 6.2 is incorrect, then the **Commission** may re-determine that matter and will advise the **obliged retailer** of its new determination within 10 **business days** of that new determination being made.

## 6.4 *Shortfalls and excesses*

- 6.4.1 Where the **Commission's** determination is that an **obliged retailer** has failed to meet an **energy audit target** or a **greenhouse gas reduction target**, the **Commission** will issue a shortfall notice under clause 3.4 or clause 4.4 (as the case may be).
- 6.4.2 Where the **Commission's** determination is that an **obliged retailer** has exceeded an **energy audit target** or a **greenhouse gas reduction target**, the **Commission** will issue an excess notice under clause 3.5 or clause 4.5 (as the case may be).

## 6.5 *Energy audit credit*

- 6.5.1 If an **obliged retailer** accrues an **energy credit** in relation to **energy audits** undertaken during the **REES year**, the **Commission** will, on application in writing by the relevant retailer, take the **energy credit** into account in its determination of whether or not the **obliged retailer** has met its **energy audit targets** in any subsequent year.

## 6.6 *Energy efficiency activity credit*

- 6.6.1 If an **obliged retailer** accrues an **energy credit** in relation to **energy efficiency activities** undertaken during a **REES year**, the **Commission** will, on application in writing by the relevant retailer, take the **energy credit** into account in its determination of whether or not the **obliged retailer** has met its **energy efficiency activity targets** in any subsequent year.

## 6.7 *Penalty Regime*

- 6.7.1 Where the **Commission** has issued an **obliged retailer** with a shortfall notice under clause 3.4 or clause 4.4 (as the case may be) in respect of either its **energy audit target** or **greenhouse gas reduction target** or **priority group greenhouse gas reduction target** and that shortfall exceeds 10% of the **energy audit target** or **greenhouse gas reduction target** or **priority group greenhouse gas reduction target**, the penalty amount payable is as outlined in Electricity (General) Regulations 2012, Regulation 35, subregulation 4 and 5 and Gas Regulations 2012 Regulation 29, subregulation 4 and 5 as follows:
- (a) a prescribed base penalty of \$10,000 for each target shortfall identified; and
  - (b) in respect of a shortfall in relation to the **obliged retailer's energy audit target** — the number of **energy audits** constituting the **energy audit** shortfall multiplied by \$500;
  - (c) in respect of a shortfall in relation to the **obliged retailer's greenhouse gas reduction target** — the number of tonnes of carbon dioxide equivalent constituting the greenhouse gas reduction shortfall multiplied by \$70;
  - (d) in respect of a shortfall in relation to the **obliged retailer's priority group greenhouse gas reduction target** the number of tonnes of carbon dioxide equivalent constituting the greenhouse gas reduction shortfall for **priority group households** multiplied by \$70.

## 7 DETERMINATION OF ENERGY EFFICIENCY ACTIVITIES

### 7.1 *Publication of the approved energy efficiency activities*

- 7.1.1 Schedule 4 of this Residential Energy Efficiency Scheme Code sets out the approved **energy efficiency activities**.

### 7.2 *Amendment to the approved energy efficiency activities*

- 7.2.1 Subject to the provisions of the **Residential Energy Efficiency Scheme**, a person may make an application to the **Commission** seeking the **Commission's** determination that:
- (a) an **energy efficiency activity** should be varied; or
  - (b) an **energy efficiency activity** should be deleted; or
  - (c) a new **energy efficiency activity** should be approved.
- 7.2.2 An application under clause 7.2.1 must:
- (a) describe the proposed variation, deletion or addition of the **energy efficiency activity**;
  - (b) set out the reasons why the person considers that the **Commission** should accept the proposed variation, deletion or addition of the **energy efficiency activity**, including supporting research, information, data or other relevant material; and
  - (c) in the case of a proposed variation or addition:
    - (i) detail the minimum specification in accordance with which the **energy efficiency activity** must be performed; and
    - (ii) specify the amount of greenhouse gases (expressed in tonnes of carbon dioxide equivalent) taken to be saved if the **energy efficiency activity** is undertaken.
- 7.2.3 The **Commission** will determine whether it will approve an application under clause 7.2.1 in accordance with the requirements of the **Residential Energy Efficiency Scheme**, including the requirements specified by the **Minister** (as set out in Schedule 7).
- 7.2.4 The **Commission** will determine processes and timing for its consideration of applications under clause 7.2.1, which may include a public call for applications and/or batching applications received for periodic review.



## 8 CONSUMER PROTECTION OBLIGATIONS

### 8.1 *Information provision*

- 8.1.1 Where an **energy audit** or **energy efficiency activity** has been performed in respect of a **residential premises**, a written information statement, containing the matters required under clause 8.1.2, must be provided to the **residential customer**.
- 8.1.2 An information statement must set out:
- (a) the name and contact details of the person or entity which performed the **energy audit** or **energy efficiency activity**;
  - (b) a description of the **energy audit** and/or **energy efficiency activity** undertaken in the **residential premises**;
  - (c) a notice that the **energy audit** or **energy efficiency activity** is intended to be counted in satisfaction of an **obliged retailer's** obligations under the **Residential Energy Efficiency Scheme**; and
  - (d) the manner in which the **residential customer** may access the dispute resolution processes required under clause 8.2.1 in relation to the **energy audit** or **energy efficiency activity** and relevant contact details for those processes.

### 8.2 *Complaints*

- 8.2.1 An **obliged retailer** must ensure that a **residential customer** has access to complaint handling and dispute resolution procedures established in accordance with AS ISO 10002-2006 for any complaints in relation to an **energy audit** or **energy efficiency activity** arising under the **Residential Energy Efficiency Scheme** or this Residential Energy Efficiency Scheme Code.

### 8.3 *Identification*

- 8.3.1 An **obliged retailer** must ensure that each person conducting an **energy audit** or **energy efficiency activity** in a **residential customer's** premises in respect of the **Residential Energy Efficiency Scheme** wears an identification badge containing:
- (a) the person's full name; and
  - (b) a photograph of the person;
  - (c) the full name of the company that they are representing (including ABN); and
  - (d) a contact telephone number of the company that they are representing.

### 8.4 *General Conduct Standards*

- 8.4.1 An **obliged retailer** must ensure a person conducting an **energy audit** or **energy efficiency activity** in a **residential customer's** premises for the purposes of the **Residential Energy Efficiency Scheme** complies with the following minimum standards of conduct:
- (a) all applicable Commonwealth and State laws must be complied with; and

- (b) the **residential customer** must be advised as to the purpose of the contact; and
- (c) there must be no misleading, deceptive or unconscionable conduct, whether by act or omission; and
- (d) undue pressure must not be exerted on the **residential customer**, and that the **residential customer** must not be harassed or coerced; and
- (e) information provided to **residential customers** must be truthful and in plain language; and
- (f) the person must leave the premises immediately when asked.

## 8.5 *Mandatory Safety Requirements*

- 8.5.1 By no later than 31 March 2012, an **obliged retailer** must ensure that all persons conducting **energy audits** or **energy efficiency activities** on behalf of that **obliged retailer** have undertaken all necessary training (including, without limitation, occupational health, safety and welfare training) to provide those **energy audits** or **energy efficiency activities** in accordance with the specifications of this Residential Energy Efficiency Scheme Code and other legislative requirements.
- 8.5.2 At the request of the **Commission**, an **obliged retailer** must provide evidence (in the manner and form specified by the **Commission**) of the matters specified under clause 8.5.1.

## 8.6 *Fit and proper person test*

- 8.6.1 An **obliged retailer** must:
  - (a) ensure that an assessment is made of the fitness and propriety of each person conducting an **energy audit** or **energy efficiency activity** in a **residential customer's** premises on the behalf of the **obliged retailer**; and
  - (b) be satisfied that the person is a fit and proper person to conduct **energy audits** or **energy efficiency activities** in **residential customers'** premises.
- 8.6.2 At the **Commission's** request, an **obliged retailer** must supply evidence in relation to the obligations imposed under clause 8.6.1.

## 8.7 *Provision of General Information about the Residential Energy Efficiency Scheme*

- 8.7.1 When contacted by a **residential customer**, an **obliged retailer** shall provide general information about the **Residential Energy Efficiency Scheme**. The minimum information to be provided includes:
  - (a) that the retailer is an **obliged retailer** for the purposes of the Scheme;
  - (b) advice on the particular **energy efficiency activities** and **energy audits** that the retailer provides; and
  - (c) an offer to take bookings to have the **energy efficiency activity** and/or **energy audit** performed in the customer's residence, and if so, assist the customer in that regard.

- 8.7.2 In meeting the requirements of 8.7.1, the **Commission** considers it appropriate for the call centre operator to transfer the caller to a nominated contact officer, or provide the caller with the telephone number of a nominated contact officer (or contractor) to address the caller's questions on behalf of the **obliged retailer**.

## SCHEDULE 1. DEFINITIONS

In this Residential Energy Efficiency Scheme Code:

**AEMO** means the Australian Energy Market Operator [ABN 94 072 010 327].

**annual energy audit target** for a **REES year** means the number determined by the **Minister** for the purposes of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012.

**annual greenhouse gas reduction target** for a **REES year** means the value determined by the **Minister** for the purposes of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012.

**business day** means a day that is not a Saturday, a Sunday or a public holiday in the State of South Australia.

**Commission** means the Essential Services Commission established under the Essential Services Commission Act 2002 (SA).

**competent person** has the meaning given to that term in the minimum specification published by the **Minister** for the purposes of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012 as provided under Schedule 3 of this Code.

**connection point** means the agreed point of **supply** between the **residential customer's** electrical installation or gas installation (as the case may be) and the distribution network.

**distributor** means means a holder of a licence authorising the operation of a distribution network under Part 3 of the Electricity Act 1996 or the Gas Act 1997 (as the case may be).

**electricity licence** means a licence authorising the sale of electricity, issued under Part 3 of the Electricity Act 1996 (SA), or a retailer authorisation issued under Part 5 of the **National Energy Retail Law** for the sale of electricity.

**electricity energy audit target** is the proportion of the **annual energy audit target** which is applicable to an **electricity retailer** in relation to a **REES year** in accordance with Part 4 of the Electricity (General) Regulations 2012 as notified to the **electricity retailer** from time to time in accordance with chapter 4 of this Residential Energy Efficiency Scheme Code.

**electricity greenhouse gas reduction target** is the proportion of the **annual greenhouse gas reduction target** which is applicable to an **electricity retailer** in relation to a **REES year** in accordance with Part 4 of the Electricity (General) Regulations 2012 as notified to the **electricity retailer** from time to time in accordance with chapter 4 of this Residential Energy Efficiency Scheme Code.

**electricity retailer** means the holder of a licence authorising the retailing of electricity, issued pursuant to Part 3 of the Electricity Act 1996 (SA), or a **NERL retailer** authorised to sell electricity, which is bound by the provisions of Part 4 of the Electricity (General) Regulations 2012 in respect of a **REES year**.

**energy audit** means an audit of a **priority group household** undertaken by an **energy retailer** in accordance with guidelines published by the **Minister** for the purposes of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012.

**energy audit target** means either or both of (as the case may be) an **electricity energy audit target** and **gas energy audit target**.

**energy credit** has the meaning given to that term in Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012.

**energy efficiency activity** means an activity specified in Schedule 4 undertaken in respect of a **residential customer's** premises.

**energy retail licence** means an **electricity licence** or **gas licence**.

**energy retailer** means either or both of (as the case may be) an **electricity retailer** and a **gas retailer**.

**Energy and Water Ombudsman** means the Ombudsman appointed under the scheme approved by the **Commission** in accordance with the requirements of the Electricity Act 1996 (SA) and Gas Act 1997 (SA).

**gas licence** means a licence authorising the sale and **supply** of gas, issued under Part 3 of the Gas Act 1997 (SA), or a retailer authorisation issued under Part 5 of the **National Energy Retail Law** for the sale of gas.

**gas energy audit target** is the proportion of the **annual energy audit target** which is applicable to a **gas retailer** in relation to a **REES year** in accordance with Part 4 of the Gas Regulations 2012 as notified to the **electricity retailer** from time to time in accordance with chapter 4 of this Residential Energy Efficiency Scheme Code.

**gas greenhouse gas reduction target** is the proportion of the **annual greenhouse gas reduction target** which is applicable to a **gas retailer** in relation to a **REES year** in accordance with Part 4 of the Gas Regulations 2012 as notified to the **gas retailer** from time to time in accordance with chapter 4 of this Residential Energy Efficiency Scheme Code.

**gas retailer** means the holder of a licence authorising the retailing of gas, issued pursuant to Part 3 of the Gas Act 1997 (SA), or a **NERL retailer** authorised to sell gas, which is bound by the provisions of Part 4 of the Gas Regulations 2012 in respect of a **REES year**.

**greenhouse gas reduction target** means either or both of (as the case may be) an **electricity greenhouse gas reduction target** and a **gas greenhouse gas reduction target**.

**hardship program customer** has the meaning given to that term in clause 1.7.1.

**materiality** has the meaning given to that term in clause 5.8 and **material** has a corresponding meaning.

**Minister** means the Minister responsible for the administration of the Electricity Act 1996 (SA) and/or the Gas Act 1997 (SA).

**National Energy Retail Law** means the Schedule to National Energy Retail Law (South Australia) Act 2011.

**NERL retailer** has the meaning given to that term in the Electricity Act 1996 and Gas Act 1997, being 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**.

**obligation threshold** has the meaning given to that term in clause 1.3.3(a).

**obliged retailer** has the meaning given to that term in clause 1.3.3(a).

**priority group greenhouse gas reduction target** means a target as determined under Part 4 of the Electricity (General) Regulation 2012 and Part 4 of the Gas Regulations 2012 (as the case may be).

**priority group household** has the meaning given to that term in Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012 and includes **residential premises** in which a person resides who is a **hardship program customer**.

**REES reporting statement** means the statement referred to in clause 5.4 provided to the **Commission** detailing an **obliged retailer's** activities undertaken in satisfaction of an **energy audit target** or a **greenhouse gas reduction target**.

**REES responsibility statement** means the statement referred to in clause 5.5.

**REES year** means each consecutive twelve-month period 1 January to 31 December, commencing on 1 January 2009.

**residential customer** means a natural person who is a **small customer** and purchases, or proposes to purchase, energy primarily for domestic purposes.

**Residential Energy Efficiency Scheme** means the scheme of that name established by the combined operation of the provisions of Part 4 of the Electricity (General) Regulations 2012 and Part 4 of the Gas Regulations 2012.

**residential premises** means the **supply address** of a **residential customer**, provided that the premises is a self-contained, permanent dwelling, used primarily for domestic purposes.

**small customer** has the meaning given to that term in the Electricity Act 1996 or the Gas Act 1997 (as the case may be), or on commencement of the National Energy Retail Law (South Australia) Act 2011 in South Australia, the meaning given to that term under section 5 of the **National Energy Retail Law**.

**supply** means the physical delivery of electricity or gas.

**supply address** means:

- (a) the address for which a **residential customer** purchases gas or electricity from an **energy retailer** where there is only one gas or electricity **connection point** at that address; or
- (b) where there is more than one **connection point** at the address, each gas or electricity **connection point** through which the **residential customer** purchases gas or electricity from the same **energy retailer**.

## SCHEDULE 2. INTERPRETATION

In this Residential Energy Efficiency Scheme Code, unless the context otherwise requires:

1. Headings and footnotes are for convenience or information only and do not affect the interpretation of this industry code or of any term or condition set out in this industry code.
2. Words importing the singular include the plural and vice versa.
3. An expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any governmental agency and vice versa.
4. A reference to a clause or appendix is to a clause or appendix of this industry code.
5. A reference to any statute includes all statutes varying, consolidating, re-enacting, extending or replacing them and a reference to a statute includes all regulations, proclamations, ordinances, by-laws and determinations issued under that statute.
6. A reference to a document or a provision of a document includes an amendment or supplement to, or replacement of or novation of, that document or that provision of that document.
7. A reference to a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns.
8. Other parts of speech and grammatical forms of a word or phrase defined in this industry code have a corresponding meaning.

## SCHEDULE 3. ENERGY AUDIT MINIMUM SPECIFICATION

An activity undertaken by an **obliged retailer** is not an **energy audit** for the purposes of the **Residential Energy Efficiency Scheme** unless it complies with the specification as published by the **Minister** from time to time.

A copy of the **Minister's** current **energy audit** minimum specification can be found at <http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-regulatory-documents.aspx>.



## SCHEDULE 4. ENERGY EFFICIENCY ACTIVITIES

### MINIMUM SPECIFICATION

An activity undertaken by an **obliged retailer** is not an **energy efficiency activity** for the purposes of the **Residential Energy Efficiency Scheme** unless it complies with the following specification.

The matters set out in this Schedule are as specified by the **Commission** by South Australian Government Gazette on 3 January 2013.

**Energy efficiency activities** undertaken prior to 3 January 2013 can continue to be reported to the **Commission**, on the basis that the minimum specification for **energy efficiency activities** as specified by the **Minister** in the South Australian Government Gazette of 30 October 2008 and as varied by the **Commission** by South Australian Government Gazette on 8 December 2011 and as published in the Residential Energy Efficiency Scheme Code Version 4 (REESC/04)<sup>1</sup> is met.

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<sup>1</sup> The Residential Energy Efficiency Scheme Code Version 4 (REESC/04) is available on the Commission's website at: <http://www.escosa.sa.gov.au/library/111130-REESCCode04.pdf>.

# Residential Energy Efficiency Scheme (REES)

## Energy Efficiency Activities

January 2013

### **PURPOSE:**

This document establishes the energy efficiency activities which a relevant electricity retailer or relevant gas retailer may choose to implement in residential premises for the purposes of achieving its Greenhouse Gas Reduction Target (EGRT or GGRT) and/or Priority Group Greenhouse Reduction Target (PGGGRT) under the Residential Energy Efficiency Scheme (REES).

These activities have been established by the Essential Services Commission of South Australia (ESCOSA) by Notice in the Government Gazette in accordance with sub-regulation 32(2) of the *Electricity (General) Regulations 2012* under the *Electricity Act 1996*, and sub-regulation 26(2) of the *Gas Regulations 2012* under the *Gas Act 1997*.

In accordance with the above regulations, ESCOSA has ongoing responsibility for maintaining this list of activities, including reviewing and amending this list where appropriate, and adding new activities. In carrying out this function, ESCOSA must have regard to any requirements set by the Minister.

### **FOR ALL ACTIVITIES:**

1. The description and specifications for activities contained within this document are minimum requirements for the purposes of complying with the REES. They are not intended to be exhaustive. In particular, in addition to the specifications set out in this document, all activities must be undertaken in accordance with all laws, regulations and codes of practice applicable to that activity. By way of example, and without limitation, these may include:
  - Electricity Act 1996
  - Gas Act 1997
  - Plumbers, Gas Fitters and Electricians Act 1995
  - Building Work Contractors Act 1995
  - Ozone Protection and Synthetic Greenhouse Gas Management Act (1989)
  - Water Industry Act 2012
  - Development Act 1993
2. Where an activity is undertaken in a rental premises, it may be necessary to first obtain the permission of the landlord or landlord's agent.
3. Any reference to gas within these specifications refers to either natural gas or Liquefied Petroleum Gas (LPG).
4. A REES approved activity may only be performed once in a residential premises. Note: for the purposes of this clause, the activity of Install CFLs is to be taken to be a new activity from 1

January 2012 (Refer Install CFLs). Only one standby power controller activity may be conducted per premises, unless it is demonstrated that the occupants of that premises have changed (refer Install Standby Power Controllers AV and IT).

5. Time at which the activity is taken to be completed: At the beginning of the day on which the specification is met.
6. Obligated retailers must be satisfied with the fitness and propriety of any person providing energy efficiency activities in a residential customer's premises as per the requirements of clause 8.6.1.
7. Any reference to Australia/New Zealand standards, is those in force at the time the activity is undertaken and includes relevant successor legislation and standards. Standards referenced in this document include (in order of appearance):

AS/NZS 6400:2005	Water efficient products – Rating and labelling
AS/NZS 4859.1:2002	Materials for the thermal insulation of buildings – General criteria and technical provisions
AS 3999:1992	Thermal insulation of dwellings – Bulk insulation – installation requirements
AS 4934.2-2011	Incandescent lamps for general lighting services – Minimum Energy Performance Standards (MEPS) requirements
AS/NZS 4847.2:2010	Self-ballasted lamps for general lighting services - Minimum Energy Performance Standards (MEPS) requirements
AS 4508-1999	Thermal resistance of insulation for ductwork used in building air conditioning
AS/NZS 60335.1:2011	Household and similar electrical appliances - Safety - General requirements
AS 4553-2008	Gas space heating appliances
AS/NZS 3823.2:2013	Performance of electrical appliances – Air conditioners and heat pumps - Energy labelling and Minimum Energy Performance Standard (MEPS) requirements
AS/NZS 60335.2.102:2004	Household and similar electrical appliances - Safety - Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections
AS/NZS 60335.2.40:2006	Household and similar electrical appliances - Safety - Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers
AS 4552:2005	Gas fired water heaters for hot water supply and/or central heating
AS/NZS 3500:2003	Plumbing and drainage
AS/NZS 60335.2.21:2002	Safety – particular requirements for storage water heaters
AS/NZS 60335.2.35:2004	Safety – particular requirements for instantaneous water heaters
AS/NZS 2712:2007	Solar and heat pump water heaters - Design and construction
AS 4234:2008	Heated water heaters – Calculation of Energy Consumption
AS 5102.1-2009	Performance of household electrical appliances – Swimming pool pump units – Energy consumption and performance
AS/NZS 3350.2.41:1997	Safety of household and similar electrical appliances – Particular requirements – Pumps
AS/NZS 3550.2.41:2004	Household and similar electrical appliances – Safety – Particular requirements for pumps
AS 4254.1-2012	Ductwork for air-handling systems in buildings – Flexible duct

8. All reasonable endeavours should be used to recycle components removed from the premises in the course of undertaking the activity.

## **INSTALL EFFICIENT SHOWERHEAD**

**Description of activity:** Install an inefficient showerhead with an efficient showerhead.

**Specification:** Each activity must comply with the following, as minimum:

1. An inefficient showerhead, in its current use, has a flow rate greater than 9 litres per minute.
2. An efficient showerhead is a product which is rated as having a 3 star water efficiency when assessed and labelled against AS/NZS 6400:2005, and with either a flow rate of up to and including 9 litres per minute (but exceeding 6 litres per minute) or of 6 litres per minute or less.
3. The replacement of an inefficient showerhead must involve the installing of the efficient showerhead in place of the inefficient showerhead.
4. The installation of an efficient showerhead must not be otherwise required by law, for example as condition of a development approval under the Development Act 1993 or in compliance with requirements under the Water Industry Act 2012.
5. An efficient showerhead which is installed must be tested to ensure it is correctly installed, does not leak, and is operating correctly at a typical showering temperature.
6. An efficient showerhead must not be installed where it would be incompatible with the operation of the hot water service currently installed. Where a replaced showerhead causes the hot water system to no longer operate (i.e. fails to heat water to a standard temperature), the installer must either reinstall the original showerhead at the request of the householder, or install a new showerhead of equivalent flow rate and quality of the original showerhead (where available), where such a request is made within 5 business days of the installation of the efficient showerhead.
7. An inefficient showerhead which is replaced must be removed from the premises.
8. The person undertaking this activity in a residential customer's premises must satisfy the REES Code mandatory safety training requirements. Registered Plumbers, Gas Fitters, Electricians and Building Work Supervisors are exempt from this requirement.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each efficient showerhead installation activity is:

### ***Deemed Value for showerhead***

ACTIVITY	TCO <sub>2</sub> -E
9 litre/minute (and exceeding 6 l/min)	1.3
6 litre/minute	3.3

**Guidance notes (not mandatory):**

- *The flow rate of a showerhead should be measured with a simple bucket test with the water running at a typical showering temperature. Hold a bucket under the running shower for 15 seconds. Measure the quantity of water captured and multiply by 4 to ascertain the per minute flow rate.*
- *Efficient showerheads are typically not compatible with gravity-fed water heaters (most already have low flow rates). They may also not be compatible with older instantaneous gas water heaters (reduced flow can interfere with the water heater operations).*
- *All reasonable endeavours should be used to recycle removed showerheads.*

## **INSTALL CEILING INSULATION**

**Description of activity:** Installation of insulation in the ceiling area above living or habitable space, which has not been previously insulated

**Specification:** Each activity must comply with the following, as minimum:

1. The insulation product must be installed in a ceiling area (or part of a ceiling area) which is above a living or habitable space, and which has not been previously insulated. This excludes topping up existing insulation (that is, installing insulation on top of existing insulation).
2. The installation of insulation must not be otherwise required by law, for example as a condition of a development approval under the Development Act 1993.
3. The insulation product must achieve a minimum R-value of 3.5 when measured in accordance with AS/NZS 4859.1:2002.
4. The insulation product must be installed in accordance with AS 3999:1992.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each square metre (m<sup>2</sup>) of insulation installed:

### ***Deemed Value for installing ceiling insulation***

ACTIVITY	TCO <sub>2</sub> -E
Installation of ceiling insulation (per	0.2

**Guidance notes (not mandatory):**

## **INSTALL DRAUGHT PROOFING PRODUCTS**

**Description of activity:** Installation of products to doors, windows, chimneys of open fireplaces or to exhaust fans to restrict or prevent air flow.

**Specification:** Each activity must comply with the following, as minimum:

1. Any product installed must be permanently fixed and have a manufacturer's warranty of a minimum 2 years. For an exhaust fan the warranty must be a minimum of 12 months.
2. A draught proofing activity must not be otherwise required by law, for example as a condition of a development approval under the Development Act 1993.
3. A draught proofing activity must comply with the South Australian Housing Code (minimum requirements for air movement in habitable rooms).
4. A draught proofing activity must only occur where it restricts air flow:
  - a. into the premises from the outside; or
  - b. between adjoining internal spaces, one of which is not mechanically or actively heated and/or cooled; or
  - c. between two adjoining internal spaces which are independently mechanically or actively heated and/or cooled.
5. No draught proofing activity must occur in rooms that have an existing flue-less gas space heater or a connection that could be used for a flue-less gas space heater.
6. Any product installed must be tested to ensure it is correctly installed, is operating correctly, and does not interfere with the normal operation of the door, window, fire place or fan to which it is fixed.
7. The person undertaking this activity in a residential customer's premises must satisfy the REES Code mandatory safety training requirements. Registered Plumbers, Gas Fitters, Electricians and Building Work Supervisors are exempt from this requirement.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each draught proofing activity is:

### ***Deemed Value for draught proofing***

ACTIVITY	TCO <sub>2</sub> -E
Door (per door)	0.2
Window (per linear metre of product)	0.02
Chimney (per chimney)	2.9
Exhaust fan (per fan)	0.1

### **Guidance notes (not mandatory):**

- *Where a fire place is likely to be used, the damper installed should be capable of being opened.*

## **DISPOSE SECONDARY REFRIGERATOR/FREEZER**

**Description of activity:** Remove and destroy a secondary refrigerator or freezer.

**Specification:** Each activity must comply with the following, as minimum:

1. A secondary refrigerator or freezer is an additional appliance that is not providing the primary refrigeration or freezer services to the household.
2. The refrigerator or freezer must be manufactured before 1996.
3. The refrigerator or freezer must be in working order.
4. The refrigerator must have an internal volume greater than 250 litres.
5. The freezer must have an internal volume greater than 100 litres.
6. The refrigerator or freezer must be removed from the premises and decommissioned. This includes removal and disposal of refrigerants and any other scheduled substances in accordance with the Australian and New Zealand refrigerant handling code of practice as established under the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each retirement of a secondary refrigerator or freezer is:

### ***Dispose Secondary Fridge/Freezer***

ACTIVITY	tCO <sub>2</sub> -E
Secondary refrigerator or freezer	1.9

### **Guidance notes (not mandatory):**

- *All reasonable endeavours should be used to ensure the refrigerator or freezer components are recycled.*
- *“Rule of thumb” guides to identifying volumes may include:*
  - *Refrigerator size is often verified by the manufacturer's label or as otherwise stamped on the appliance.*
  - *An average family refrigerator is about 400 litres, including refrigerator and freezer sections. Most bar refrigerators are much smaller than 250 litres.*
  - *Volume can be estimated using internal measurements:- Volume (litres) = Height x Width x Depth (centimetres) / 1000.*



## **INSTALL CFLS**

**Description of activity:** Remove a reflector or non-reflector halogen or incandescent lamp and replace it with a compact fluorescent lamp (CFL).

**Specification:** Each activity must comply with the following, as minimum:

1. The CFL model installed shall comply with AS/NZS4847.2:2010 and shall have a current, approved registration in the MEPS registration system ([www.energyrating.gov.au](http://www.energyrating.gov.au)).
2. The CFL model installed shall have a measured median lamp life of 10,000 hours or more, verified by test reports.
3. The CFL shall be installed at the time of removal of the incandescent/halogen lamp.
4. A person or entity undertaking this activity shall use best endeavours to ensure any replacements are targeted at high usage lamp fittings in the first instance.
5. The rated power of each incandescent/halogen lamp replaced shall be classed according to Table CFL1 (non-directional lamps) or Table CFL2 (directional lamps), using column B for incandescent and column C for halogen lamps (fit to next lowest rated power if required). The CFL replacement model shall have a measured average initial luminous flux (verified by test report) of at least the corresponding value in column D, for the same class of replaced lamp.
6. The rated colour temperature of any CFL installed shall not exceed 3000 Kelvin, unless otherwise authorised by the occupant of the premises.
7. A CFL 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.
8. All incandescent/halogen lamps that are replaced must be in working order immediately prior to removal.
9. All incandescent/halogen lamps that are replaced shall be removed from the premises. They shall not be re-used.
10. The number of individual replacements in any one premises shall not exceed 20. Premises at which up to 8 CFLs were installed in Stage 1 of the Scheme (1 January 2009 – 31 December 2011) will be permitted to have up to an additional 20 replacement CFLs installed from 1 January 2012 provided that all other aspects of activity specification and Code requirements are met.
11. The person undertaking this activity in a residential customer's premises must satisfy the REES Code mandatory safety training requirements. Registered Plumbers, Gas Fitters, Electricians and Building Work Supervisors are exempt from this requirement.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each replacement are given in Table CFL1 (column E) and CFL2 (column E):

**Table CFL1 – Deemed Value for Non-directional lamps replacement**

A	B	C	D	E
CLASS	REMOVED LAMP: TYPICAL RATED INCANDESCENT LAMP POWER (W)	REMOVED LAMP: TYPICAL RATED HALOGEN LAMP POWER (W)	INSTALLED LAMP: MINIMUM CFL LUMINOUS FLUX  (LUMENS)	DEEMED VALUE  (T CO <sub>2</sub> -E)
1	40	28	350	0.10
2	60	42	650	0.14
3	75	53	850	0.18
4	100	70	1,150	0.25
5	150	105	1,800	0.38

**Table CFL2 – Deemed Value for Directional lamps replacement**

A	B	C	D	E
CLASS	REMOVED LAMP: TYPICAL RATED INCANDESCENT LAMP POWER (W)	REMOVED LAMP: TYPICAL RATED HALOGEN LAMP POWER (W)	INSTALLED LAMP: MINIMUM CFL LUMINOUS FLUX  (LUMENS)	DEEMED VALUE  (T CO <sub>2</sub> -E)
1	40	28	250	0.23
2	60	42	460	0.34
3	75	53	600	0.43
4	100	70	810	0.58
4a	120	84	1,010	0.70
5	150	105	1,260	0.89

**Guidance notes (not mandatory):**

- All reasonable endeavours should be used to recycle removed lamps.
- When reading Table CFL1 and Table CFL2, the deemed value to be applied is based on the lamp being removed (Column B).

## **INSTALL EFFICIENT EXTRA LOW VOLTAGE DOWN LIGHTS**

**Description of activity:** Three variations of installation of high efficiency down light lamps, all of which involve replacing the existing lamps or parts of the lighting system with a more efficient alternative.

**Specification:** Each activity must comply with the following, as minimum:

1. The lamp model installed shall have an average downward initial luminous flux of 500 lumens or more, verified by test report.
2. The lamp model installed shall have a median lamp life of 5,000 hours or more, verified by test report.
3. The lamp model installed shall have an average lumen maintenance of 80% or more, after 2,000 hours of operation, verified by test report.
4. The lamp installed shall have a minimum beam angle of 35 degrees.
5. The CFL model installed shall comply with AS/NZS4847.2:2010 and shall have a current, approved registration in the MEPS registration system ([www.energyrating.gov.au](http://www.energyrating.gov.au)).
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.
7. The lamp shall be installed at the time of removal of the incandescent/halogen lamp.
8. A person or entity undertaking this activity shall use best endeavours to ensure any replacements are targeted at high usage lamp fittings in the first instance.
9. The rated colour temperature of any lamp installed shall not exceed 3000 Kelvin, unless otherwise authorised by the occupant of the premises.
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.
11. 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.
12. Other than for simple exchange of lamps for an existing fitting, installation required by a licenced electrician.

13. All lamps, transformers and luminaires that are replaced shall be removed from the premises. They shall not be re-used.
14. The person undertaking this activity in a residential customer's premises must satisfy the REES Code mandatory safety training requirements. Registered Plumbers, Gas Fitters, Electricians and Building Work Supervisors are exempt from this requirement.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each replacement for each of the 3 variations are given in the following tables:

***Option 1 – Deemed Value for 50W ELV replacement lamps***

LAMP LIFE OF REPLACEMENT LAMP (HOURS)	POWER OF REPLACEMENT LAMP (W)					
	≤ 10	11 TO 15	16 TO 20	21 TO 25	26 TO 30	31 TO 35
5,000	0.17	0.14	0.11	0.09	0.06	0.03
6,000	0.19	0.16	0.13	0.10	0.06	0.03
7,000	0.22	0.18	0.15	0.11	0.07	0.03
8,000	0.25	0.20	0.16	0.12	0.07	0.03
9,000	0.27	0.23	0.18	0.13	0.08	0.03
10,000	0.30	0.25	0.19	0.14	0.09	0.03

***Option 2 – Deemed Value for 50W ELV replacement lamps plus magnetic to electronic transformer replacement***

LAMP LIFE OF REPLACEMENT LAMP (HOURS)	POWER OF REPLACEMENT LAMP (W)					
	≤ 10	11 TO 15	16 TO 20	21 TO 25	26 TO 30	31 TO 35
5,000	n.a.	n.a.	n.a.	0.14	0.12	0.09
6,000	n.a.	n.a.	n.a.	0.15	0.12	0.09
7,000	n.a.	n.a.	n.a.	0.16	0.13	0.09
8,000	n.a.	n.a.	n.a.	0.17	0.13	0.09
9,000	n.a.	n.a.	n.a.	0.18	0.14	0.09
10,000	n.a.	n.a.	n.a.	0.19	0.14	0.09

***Option 3 – Deemed Value for 50W ELV lamps & transformer replacement with lower power lighting unit***

LAMP LIFE OF REPLACEMENT LAMP (HOURS)	TOTAL CIRCUIT POWER OF REPLACEMENT (W)					
	≤ 10	11 TO 15	16 TO 20	21 TO 25	26 TO 30	31 TO 35
5,000	0.17	0.15	0.13	0.10	0.08	0.06
6,000	0.20	0.17	0.15	0.12	0.09	0.06
7,000	0.23	0.20	0.17	0.13	0.10	0.07
8,000	0.26	0.22	0.18	0.15	0.11	0.07
9,000	0.29	0.25	0.20	0.16	0.12	0.08
10,000	0.32	0.27	0.22	0.18	0.13	0.08

**Guidance notes (not mandatory):**

- All reasonable endeavours should be used to recycle removed lamps.

## **UPGRADE DUCTWORK**

**Description of activity:** Installation of ductwork of higher than standard insulation to a small or large reverse cycle air conditioner or gas central heater.

**Specification:** Each activity must comply with the following, as minimum:

1. A small ducted reverse cycle air conditioner is one that has a rated cooling output of between 7 and 14 kW.
2. A large ducted reverse cycle air conditioner is one that has a rated cooling output of greater than 14 kW.
3. The relevant ductwork must be flexible ductwork and be installed within a roof space or between a floor and the natural ground.
4. The ductwork must achieve a minimum R-value of 1.5 when measured in accordance with AS 4508:1999.
5. The installation of ductwork at an R-value of 1.5 must not be otherwise required by law, for example as a condition of a development approval under the Development Act 1993 or the Building Code of Australia.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each ductwork activity is:

### ***Deemed Value for ductwork***

ACTIVITY	TCO <sub>2</sub> -E
Small ducted reverse cycle air conditioner (7-14kW)	2.0
Large ducted reverse cycle air conditioner (>14kW)	2.7
Ducted gas heater	1.7

### **Guidance notes (not mandatory):**

- *This activity is intended to encourage installation of ductwork with insulation value higher than might otherwise occur. It is anticipated that the ductwork will be installed at the time of installing a heating/cooling system. However, retrofitting is not precluded.*

### **UPGRADE HEATING/COOLING SYSTEM (NON-DUCTED)**

**Description of activity:** Install upgraded efficient room reverse cycle air conditioner or gas room heater.

**Specification:** Each activity must comply with the following, as minimum:

1. An efficient system is one of the following:
2. A gas room heater which is rated as 5 star or higher when assessed and labelled against AS 4553-2008; and which is not flue-less.
3. A reverse cycle air conditioner (room) which is rated as 3 star or higher for both heating and cooling when assessed and labelled against AS/NZS 3823.2:2013.
4. A small or large system is defined by its rated heating or cooling output as follows:

ACTIVITY	SMALL	LARGE
Gas room heater	6.5 kW or less heating output	More than 6.5 kW heating output
Reverse cycle air conditioner (room)	4 kW or less cooling output	More than 4 kW cooling output

5. Any gas room heater installed must comply with AS 60335.2.102:2004.
6. Any reverse cycle air conditioner installed must comply with AS 60335.2.40:2006.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) attributed to each installation of a system is:

#### ***Deemed Value for heating/cooling system (non-ducted)***

ACTIVITY	SMALL tCO <sub>2</sub> -E	LARGE tCO <sub>2</sub> -E
Install a 5 star gas room heater	2.3	2.6
Install a 6 star gas room heater	3.1	3.5
Install a 3 star reverse cycle air conditioner	0.1	1.4
Install a 4 star reverse cycle air conditioner	0.6	2.4
Install a 5 star reverse cycle air conditioner	1.0	3.2
Install a 6 star reverse cycle air conditioner	1.3	3.8

#### **Guidance notes (not mandatory):**

- *Persons installing heating/cooling systems should have regard to the “Air Conditioning Residential Best Practice Guideline” (2003) published by the Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH).*
- *All reasonable endeavours should be used to recycle removed systems.*

## **REPLACE OR UPGRADE WATER HEATER**

**Description of activity:** Install or replace a water heater.

**Specification:** Each activity must comply with the following, as minimum:

1. The activity must be undertaken in circumstances defined in Table WH1 and Table WH2, and with reference to the requirements of the Revised Direction to give effect to Adoption of Greenhouse Gas and Water Flow Rate Performance Standards for Water Heater Installations.
2. The installed/replacement water heater must be of the relevant Type defined in Table WH3.
3. The installation of a water heater must not be otherwise required by law, for example as a condition of a development approval under the Development Act 1993 or in compliance with requirements under the Water Industry Act 2012.
4. The water heater must be installed in accordance with relevant installation standards (both electrical and gas) including, but not limited, to AS/NZS 3500:2003 (plumbing and drainage); AS 4552:2005 (gas hot water systems); AS/NZS 60335.2.21:2002 (electric storage water heaters); AS/NZS 60335.2.35:2004 (instantaneous water heaters).
5. Any existing water heater must be removed from the premises and decommissioned. This includes removal and disposal of any refrigerants and other scheduled substances (where applicable) in accordance with the Australian and New Zealand refrigerant handling code of practice as established under the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.
6. *Exception:-* where it is not practicable to remove all or part of the system, then it must be decommissioned, with any refrigerants and other scheduled substances disposed of in accordance with the above code of practice. The householder must authorise the system (or part of the system) remaining in place.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each early replacement of water heaters are given in Table WH1, and for each installation of upgraded water heaters in Table WH2:

***Table WH1 – Deemed Value for early replacement of water heaters***

ACTIVITY	TECHNOLOGY	τCO <sub>2</sub> -E
Early retirement & replace water heater that is: <ul style="list-style-type: none"><li>• Operational;</li><li>• In service; and</li><li>• Less than 5 years old</li></ul>	From: Electric	
	To: Gas (5 star)*	16.2
	To: Electric Boosted Solar	15.7
	To: Electric Heat Pump	15.6
	To: Gas Boosted Solar	20.4

*\*Gas includes Natural and LPG*



**Table WH2 – Deemed Value for installation of upgraded water heaters**

ACTIVITY	TECHNOLOGY	TCO <sub>2</sub> -E
Upgrade replacement of an inoperable water heater in a residential situation, where the installation <u>is not</u> required to meet the full standard for SA's water heater installation requirements.	From: Electric	
	To: Gas (5 star)*	24.3
	To: Electric Boosted Solar	23.5
	To: Electric Heat Pump	23.4
	To: Gas Boosted Solar	30.6
	From: Gas*	
	To: Gas (5 star)	1.9
	To: Gas Boosted Solar	8.3
Upgrade replacement of an inoperable water heater in a residential situation, where the installation <u>is</u> required to meet the full standard for SA's water heater installation requirements.	To: Gas Boosted Solar	6.3
Upgrade of a new water heater installation in a residential situation, where the installation <u>is not</u> required to meet the full standard for SA's water heater installation requirements.	To: Gas (5 star)*	1.9
	To: Gas Boosted Solar	8.3
	To: Electric Boosted Solar	23.5
	To: Electric Heat Pump	23.4

\*Gas includes Natural and LPG

**Table WH3 – Minimum efficiency requirements for water heater upgrades**

WATER HEATER TECHNOLOGY INSTALLED		DETERMINE TYPE BY REFERENCE TO	MINIMUM EFFICIENCY
Gas (Natural Gas or LPG) <sup>1</sup>	Storage (volume ≤ 700 litres)	Energy Rating	≥ 5.0 star
	Instantaneous or Continuous Flow		
Electric Boosted Solar or Electric Heat Pump <sup>2</sup>	Tank ≤ 220 litres <sup>4</sup>	Eligibility for Small Scale Technology Certificates (STCs) in ORER Zone 3	≥ 17 RECS
	Tank > 220 litres and < 400 litres <sup>4</sup>		≥ 27 RECS
	Tank ≥ 400 litres and ≤ 700 litres <sup>4</sup>		≥ 38 RECS
Gas Boosted Solar <sup>3</sup>	Tank ≤ 220 litres <sup>4</sup>	Eligibility for Small Scale Technology Certificates (STCs) in ORER Zone 3	≥ 17 RECS
	Tank > 220 litres and < 400 litres <sup>4</sup>		≥ 27 RECS
	Tank ≥ 400 litres and ≤ 700 litres <sup>4</sup>		≥ 38 RECS

Note 1: A gas water heater which has an energy rating measured in accordance with AS 4552-2005.

Note 2: An electric boosted solar or electric heat pump water heater, with a tank volume less than 700L, which complies with AS/NZS 2712:2007<sup>2</sup>, and which is eligible for Small Scale Technology Certificates (STCs) when installed in the Office of the Renewable Energy Regulator (ORER) Zone 3 when measured in accordance with AS 4234:2008.<sup>3</sup>

Note 3: A gas boosted solar water heater, with a tank volume less than 700L, which complies with AS/NZS 2712:2007, and which is eligible for Small Scale Technology Certificates (STCs) when installed in the Office of the Renewable Energy Regulator (ORER) Zone 3 when measured in accordance with AS 4234:2008.

Note 4: For multi-tank or series connected instantaneous boost systems, consider the pre-heat tank only, and halve the volume specified.

**Guidance notes (not mandatory):**

- *This activity is to encourage households to exceed applicable water heater standards (greenhouse gas and water flow rate performance standards) where they would not otherwise be required to do so. These standards are given effect by Ministerial Direction under the National Construction Code Volume 3, Plumbing Code of Australia (South Australian appendix).*
- *All reasonable endeavours should be used to recycle removed water heaters.*

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<sup>2</sup> AS/NZS 2712:2007 - Solar and Heat Pump Water Heaters - Design and Construction.

<sup>3</sup> AS 4234:2008 - Heated Water Heaters – Calculation of Energy Consumption.

## **INSTALL STANDBY POWER CONTROLLERS – AUDIO VISUAL (AV) ENVIRONMENT**

**Description of activity:** Install a standby power controller to automatically reduce the standby energy consumption of residential audio visual equipment (standby power controller (AV)).

**Specification:** Each activity must comply with the following, as minimum:

1. The standby power controller (AV) must:
  - a. meet the requirements of any applicable Australian Standard in force in respect of standby power controllers; and
  - b. in the absence of any applicable Australian Standard must, when tested by an approved laboratory in accordance with an approved laboratory test, be determined to be suitable for use in an audio visual environment and demonstrated to:
    - i. be capable of controlling the power of at least 4 appliances (whether directly or indirectly);
    - ii. be fitted with a mains power switching device that is rated to a minimum of 50,000 switching cycles;
    - iii. have an electric power consumption of not more than 1 watt when tested in accordance with the laboratory test;
    - iv. automatically disconnect mains power from controlled appliances:
      - in the case of a product that relies on a master/slave arrangement – when the master appliance is turned off;
      - in the case of a product that relies on sensing infra-red signals from the remote controls of controlled appliances – after a period of time specified in the laboratory test when the product does not detect infra-red signals from those remote controls that are triggered by a user;
    - v. automatically reconnect mains power to the controlled appliances only when:
      - in the case of a product that relies on a master/slave arrangement – when the master appliance is turned on;
      - in the case of a product that relies on sensing infra-red signals from the remote controls of controlled appliances – when any of the controlled appliances are operated by a user;
    - vi. be able, at the time of installation, to disconnect mains power from or reconnect mains power to controlled appliances without having to be set up to have those functions assigned to the operation of an existing appliance remote control; and
    - vii. not require manual setting of a current or power threshold.
  2. The standby power controller must be connected to at least 2 controlled appliances at the time of installation.

3. No more than 4 standby power controllers (AV) may be installed in one premises provided that, where more than 1 standby power controller (AV) is or is to be installed at premises at which more than 1 standby power controller (IT) (refer separate REES activity) is also installed, the total number of installed standby powers controllers (IT and AV) must not exceed 4.
4. Only one standby power controller activity may be conducted per premises, unless it is demonstrated that the occupants of that premises have changed. The Commission will determine a process under which change of occupants can be demonstrated.
5. Where an obliged retailer:
  - a. installs, or causes to be installed, a standby power controller (AV) model which has performance capabilities in excess of the minimum requirements specified in item 1;
  - b. wishes to assign to the installation of that model a deemed carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) value greater than that assigned to "Class 1" as specified in Table 1; and
  - c. has evidence, in the form of an official approval letter issued by the Essential Services Commission of Victoria under the Victorian Energy Efficiency Target Regulations 2008:
    - i. that the performance of that model is in excess of the minimum requirements specified in item 1; and
    - ii. of the class of standby power controller (AV) (as specified in in column 1 of Table 1) to which that model is to be assigned,

then, prior to the installation of any standby power controller (AV) of that model, the obliged retailer must:
  - d. have provided the Commission with a copy of the official approval letter issued by the Essential Services Commission of Victoria evidencing the matters set out in item 4c; and
  - e. received the written approval of the Commission to:
    - i. install that model of standby power controller (AV); and
    - ii. assign that model to a class set out in Table 1.
  - f. provide the Commission with any revised or updated approval letters issued by the Essential Services Commission of Victoria amending previously provided approvals.
6. The Commission must approve the manner of installation, and the form and manner of training (including on-going support) that must be provided to the residential customer, prior to the activity being undertaken (applies to classes 1 to 6).
7. A person or entity undertaking this activity shall use best endeavours to ensure any installations are targeted at high usage applications in the first instance.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed for each installation of a standby power controller (AV) is:

**Table 1: Standby Power Controller AV, deemed CO<sub>2</sub>-e saving values**

STANDBY POWER CONTROLLER CLASS	TCO <sub>2</sub> -E
<b>Class 1A</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1</li> </ul>	0.7
<b>Class 1B</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Does not operate solely on the basis of a master/slave arrangement; and</li> <li>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</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	0.9
<b>Class 1C</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Does not operate solely on the basis of a master/slave arrangement; and</li> <li>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</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	1.4
<b>Class 2A</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Does not operate solely on the basis of a master/slave arrangement; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 2 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	1.8
<b>Class 2B</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Does not operate solely on the basis of a master/slave arrangement; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 2.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	2.3
<b>Class 3A</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Does not operate solely on the basis of a master/slave arrangement; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 3 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of</li> </ul>	2.7

STANDBY POWER CONTROLLER CLASS	TCO <sub>2</sub> -E
Victoria.	
<b>Class 3B</b> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Does not operate solely on the basis of a master/slave arrangement; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 3.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	3.2
<b>Class 4A</b> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Does not operate solely on the basis of a master/slave arrangement; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 4 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	3.6
<b>Class 4B</b> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Does not operate solely on the basis of a master/slave arrangement; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 4.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	4.1
<b>Class 5A</b> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Does not operate solely on the basis of a master/slave arrangement; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	4.5
<b>Class 5B</b> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Does not operate solely on the basis of a master/slave arrangement; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 5.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	5.0

STANDBY POWER CONTROLLER CLASS	TCO <sub>2</sub> -E
<p><b>Class 6A</b></p> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Does not operate solely on the basis of a master/slave arrangement; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 6 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	5.4

## **Definitions**

<i>approved laboratory test</i>	<p>a test approved by the Commission, and in the absence of the Commission specifying an approved laboratory test a test that meets the Essential Services Commission of Victoria published testing requirements.</p> <p>The Essential Services Commission of Victoria laboratory testing requirements are provided in the document “Explanatory Note- Laboratory Tests for Standby Power Controllers”, Version 1.1 – 29 August 2011, as amended from time to time, available at: <a href="https://www.veet.vic.gov.au/Public/Public.aspx?id=Publications">https://www.veet.vic.gov.au/Public/Public.aspx?id=Publications</a></p>
<i>mains power switching device</i>	<p>means a relay or other device that switches the power to the controlled appliances on or off</p>
<i>master/slave arrangement</i>	<p>in relation to a standby power controller, means an arrangement where the standby power controller is connected to an uncontrolled master appliance, whose current or power is solely used to control the electrical input to controlled appliances connected to the standby power controller</p>

## **Guidance notes (not mandatory):**



## **INSTALL STANDBY POWER CONTROLLERS – INFORMATION TECHNOLOGY (IT) ENVIRONMENT**

**Description of activity:** Install a standby power controller to automatically reduce the standby energy consumption of residential information technology equipment (standby power controller (IT)).

**Specification:** Each activity must comply with the following, as minimum:

1. The standby power controller (IT) must:
  - a. meet the requirements of any applicable Australian Standard in force in respect of standby power controllers; and
  - b. in the absence of any applicable Australian Standard must, when tested by an approved laboratory in accordance with an approved laboratory test, be determined to be suitable for use in an information technology environment and demonstrated to:
    - i. be suitable for use with desktop and notebook computers that are not more than 2 years old;
    - ii. be capable of controlling the power of at least 4 appliances (whether directly or indirectly);
    - iii. be fitted with a mains power switching device that is rated to a minimum of 50,000 switching cycles;
    - iv. have an electric power consumption of not more than 1 watt when tested in accordance with the laboratory test;
    - v. automatically disconnect mains power from controlled appliances when the master computer is switched to Off Mode;
    - vi. automatically reconnect mains power to the controlled appliances when the master computer enters Active State;
    - vii. not be reliant on a universal serial bus connection to determine the operating mode of the computer;
    - viii. be able, at the time of installation, to disconnect mains power from or reconnect mains power to controlled appliances without having to be set up to have those functions assigned to the operation of an existing appliance remote control; and
    - ix. not require manual setting of a current or power threshold.
2. The standby power controller must be connected to at least 2 controlled appliances at the time of installation.

3. No more than 4 standby power controllers (IT) may be installed in one premises provided that, where more than 1 standby power controller (IT) is or is to be installed at premises at which more than 1 standby power controller (AV) (refer separate REES activity) is also installed, the total number of installed standby powers controllers (IT and AV) must not exceed 4.
4. Only one standby power controller activity may be conducted per premises, unless it is demonstrated that the occupants of that premises have changed. The Commission will determine a process under which change of occupants can be demonstrated.
5. Where an obliged retailer:
  - a. installs, or causes to be installed, a standby power controller (IT) model which has performance capabilities in excess of the minimum requirements specified in item 1;
  - b. wishes to assign to the installation of that model a deemed carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) value greater than that assigned to "Class 1" as specified in Table 2; and
  - c. has evidence, in the form of an official approval letter issued by the Essential Services Commission of Victoria under the Victorian Energy Efficiency Target Regulations 2008:
    - i. that the performance of that model is in excess of the minimum requirements specified in item 1; and
    - ii. of the class of standby power controller (IT) (as specified in in column 1 of Table 2) to which that model is to be assigned,then, prior to the installation of any standby power controller (IT) of that model, the obliged retailer must:
  - d. have provided the Commission with a copy of the official approval letter issued by the Essential Services Commission of Victoria evidencing the matters set out in item 4c; and
  - e. received the written approval of the Commission to:
    - i. install that model of standby power controller (IT); and
    - ii. assign that model to a class set out in Table 2.
  - f. provide the Commission with any revised or updated approval letters issued by the Essential Services Commission of Victoria amending previously provided approvals.
6. The Commission must approve the manner of installation, and the form and manner of training (including on-going support) that must be provided to the residential customer, prior to the activity being undertaken (applies to classes 1 to 6).
7. A person or entity undertaking this activity shall use best endeavours to ensure any installations are targeted at high usage applications in the first instance.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed for each installation of a standby power controller (IT) is:

**Table 2: Standby Power Controller IT, deemed CO<sub>2</sub>-e saving values**

STANDBY POWER CONTROLLER CLASS	tCO <sub>2</sub> -E
<b>Class 1A</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1</li> </ul>	0.6
<b>Class 1B</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>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</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	0.9
<b>Class 1C</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>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</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	1.4
<b>Class 2A</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 2 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	1.8
<b>Class 2B</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 2.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	2.3
<b>Class 3A</b> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 3 tonnes of carbon dioxide</li> </ul>	2.7

STANDBY POWER CONTROLLER CLASS	TCO <sub>2-E</sub>
<p>equivalents over a 10 year period; and</p> <ul style="list-style-type: none"> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	
<p><b>Class 3B</b></p> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 3.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	3.2
<p><b>Class 4A</b></p> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 4 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	3.6
<p><b>Class 4B</b></p> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 4.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	4.1
<p><b>Class 5A</b></p> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	4.5
<p><b>Class 5B</b></p> <ul style="list-style-type: none"> <li>Meets the minimum specification set out in item 1; and</li> <li>Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 5.5 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	5.0

STANDBY POWER CONTROLLER CLASS	tCO <sub>2</sub> -E
<b>Class 6A</b> <ul style="list-style-type: none"> <li>• Meets the minimum specification set out in item 1; and</li> <li>• Is capable of automatically disconnecting mains power to controlled appliances when the master computer enters Sleep Mode; and</li> <li>• Has been demonstrated to the satisfaction of the Essential Services Commission of Victoria to be capable of achieving abatement of at least 6 tonnes of carbon dioxide equivalents over a 10 year period; and</li> <li>• Has been subjected to a field trial approved by the Essential Services Commission of Victoria.</li> </ul>	5.4

### **Definitions**

<i>approved laboratory test</i>	<p>a test approved by the Commission, and in the absence of the Commission specifying an approved laboratory test a test that meets the Essential Services Commission of Victoria published testing requirements.</p> <p>The Essential Services Commission of Victoria laboratory testing requirements are provided in the document “Explanatory Note- Laboratory Tests for Standby Power Controllers”, Version 1.1 – 29 August 2011, as amended from time to time, available at: <a href="https://www.veet.vic.gov.au/Public/Public.aspx?id=Publications">https://www.veet.vic.gov.au/Public/Public.aspx?id=Publications</a></p>
<i>Active State</i>	<p>in relation to a computer, means a state in which the computer is carrying out useful work in response to prior or concurrent-</p> <p>(a) user input; or</p> <p>(b) Instruction over a network</p>
<i>mains power switching device</i>	means a relay or other device that switches the power to the controlled appliances on or off
<i>master/slave arrangement</i>	in relation to a standby power controller, means an arrangement where the standby power controller is connected to an uncontrolled master appliance, whose current or power is solely used to control the electrical input to controlled appliances connected to the standby power controller
<i>Off Mode</i>	in relation to a computer, means a low power state that the computer is capable of entering automatically after a period of inactivity or by manual selection.

### **Guidance notes (not mandatory):**

## **PROMOTE THE INSTALLATION OF HIGH EFFICIENCY POOL PUMPS**

**Description of activity:** Install upgraded high energy efficient pool pump.

**Specification:** Each activity must comply with the following, as minimum:

1. The pool pump must be purchased for the use in a residential pool or spa.
2. If the installation requires an electrical compliance certificate, one is provided and lodged with the Office of Technical Regulator.
3. The pool pump is required to:
  - a. be a single phase pump;
  - b. have an input power between 300W and 1500W when tested in accordance with AS 5102.1-2009;
  - c. be listed as part of the labelling scheme with the Equipment Energy Efficiency Committee's Voluntary Energy Rating Labelling Program for Swimming Pool Pump-units;
  - d. have a minimum star rating of 3 as determined by AS 5102.1-2009;
  - e. as a proclaimed product in South Australia, meet the safety requirements of AS/NZS 3350.2.41:1997 or AS/NZS 60335.2.41:2004.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) attributed to a high efficiency pool pump is determined by using the value derived from applying the following formulae to assign the appropriate class for the pool pump:

### **Formulae**

Deemed value =  $0.00003 * Q * (1,622 - PAEC) * 0.9$

Where:

Q = flow rate in litres/minute of the pump

PAEC (Projected Annual Energy Consumption) =  $18,250 / \{9 * \text{Exp}[\text{Loge}(1.25) * (SRI - 1)]\}$

SRI = star rated index of the high efficiency pump being installed.

### **Pool Pump Class**

The following table determines the appropriate class to place a specific pool pump, and the corresponding REES deemed value.

**Table 3: Pool Pump, deemed CO<sub>2</sub>-e saving values**

POOL PUMP CLASS	tCO <sub>2</sub> -E
<b>Class 1</b> <ul style="list-style-type: none"> <li>Raw value from formulae is less than or equal to 1.499</li> </ul>	1.0
<b>Class 2</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 1.5, or is less than or equal to 2.499</li> </ul>	2.0
<b>Class 3</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 2.5, or is less than or equal to 3.499</li> </ul>	3.0
<b>Class 4</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 3.5, or is less than or equal to 4.499</li> </ul>	4.0
<b>Class 5</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 4.5, or is less than or equal to 5.499.</li> </ul>	5.0
<b>Class 6</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 5.5, or is less than or equal to 6.499.</li> </ul>	6.0
<b>Class 7</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 6.5, or is less than or equal to 7.499.</li> </ul>	7.0
<b>Class 8</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 7.5, or is less than or equal to 8.499.</li> </ul>	8.0
<b>Class 9</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals 8.5, or is less than or equal to 9.499.</li> </ul>	9.0
<b>Class 10</b> <ul style="list-style-type: none"> <li>Raw value from formulae equals, or is greater than 9.5.</li> </ul>	10.0

**Guidance notes (not mandatory):**

## **INSTALLATION OF ENHANCED AIR CONDITIONING DUCTWORK SYSTEM**

**Description of activity:** Replacement of an existing flexible ductwork system for a reverse cycle air-conditioner with a new flexible ductwork system (including all fittings).

**Specification:** Each activity must comply with the following, as minimum:

1. The new flexible ductwork system must:
  - a. be tested as certified by an approved laboratory as complying with AS 4254.1-2012;
  - b. be insulated using bulk insulation that:
    - i. is certified by an accredited body or approved laboratory as complying with AS/NZS 4859.1:2002 and achieves a minimum R value of R1.5 when measured in a flat plate test in accordance with AS/NZS 4859.1:2002; and
    - ii. has a thickness of the insulation as installed in the ducting that matches the design insulation thickness as specified by the insulation manufacturer;
  - c. is certified by an accredited body or approved laboratory as having an insulation conductivity and thickness such that the TRUE radial R value defined by equation 4 in AS 4508-2009, section 3.2.3, is greater than or equal to 1.3 K/W based on a one metre length of 300 mm internal diameter duct (i.e.  $r_i = 0.15$  m). Furthermore, all other duct sizes used in the installation shall use the same insulation (conductivity and thickness) as that used in the 300mm internal diameter ducting;
  - d. be longitudinally labelled at intervals of not more than 1.5 metres, in characters that are clearly legible and at least 18mm high stating:
    - i. the duct manufacturer's or duct assembler's name; and
    - ii. the diameter of the duct core; and
    - iii. the R-value of the bulk insulation; and
    - iv. whether the ductwork complies with AS 4254.1-2012;
  - e. use fittings that achieve at least the R-value specified by Table 3.12.5.2 of the Building Code of Australia (BCA2013). All dampers must be positive seal dampers to prevent leakage;
  - f. be installed and supported in accordance with the requirements set out in AS 4254.1-2012;
  - g. in addition to the requirements set out in AS 4254.1-2012, be installed consistent with industry best practice which is considered to be outlined in the *Installation Requirements* provided with this specification; and
  - h. include a warranty period of at least 20 years for all parts and labour.



2. Prior to engaging in this activity, the obliged retailer must:
  - a. have provided the Commission with an application for the approval of:
    - i. a software tool to assess the performance of the pre-existing ductwork system and the replacement ductwork system which verifies a specified percentage reduction in duct losses as outlined in Table 1; and
    - ii. the assessment process for which independent testing will be undertaken on the flexible ductwork system to ensure verifiability;
  - b. receive the written approval of the Commission to:
    - i. install the flexible ductwork system; and
    - ii. assign that system to an appropriate class as set out in Table 1.
3. For every installation, the flexible ductwork system must be independently tested using the system and process approved by the Commission prior to the installation being undertaken and again after the installation is completed. This testing must be conducted on site using the actual measurements for the installation and demonstrate a reduction in duct losses of a percentage outlined in Table 1 after the installation is completed compared to before the installation is undertaken.

**Deemed value:** The carbon dioxide (CO<sub>2</sub>) equivalents (tonnes) to be attributed to each flexible ductwork system activity is:

**Table 1: enhanced air conditioning ductwork system, deemed tCO<sub>2</sub>-e saving values**

ENHANCED AIR CONDITIONING DUCTWORK SYSTEM CLASSES	tCO <sub>2</sub> -E			
<b>Class 1</b>	Zone 1	Zone 2	Zone 3	Zone 4
<ul style="list-style-type: none"> <li>Meets the specifications; and</li> <li>Has been independently tested using a system and process approved by the Commission and demonstrates a reduction in duct losses of at least 30% after the activity is completed compared to before the activity is undertaken.</li> </ul>	11.9	13.5	24.6	16.5
<b>Class 2</b>	Zone 1	Zone 2	Zone 3	Zone 4
<ul style="list-style-type: none"> <li>Meets the specifications; and</li> <li>Has been independently tested using a system and process approved by the Commission and demonstrates a reduction in duct losses of at least 40% after the activity is completed compared to before the activity is undertaken.</li> </ul>	15.9	18.0	32.8	21.9

The zones outlined in the Table 1 above can be determined by postcode. The postcode range for each zone is outlined in Table 2 below:

**Table 2: Postcodes associated to each Zone**

<b>Zones</b>	<b>Post code range</b>
Zone 1	5000 – 5133 5157 – 5223 5238 5253 – 5256 5302 – 5350 5354 5357 5371 – 5372 5381 – 5400 5418 – 5642 5661 – 5690 5950
Zone 2	5650 – 5660 5700 – 5734
Zone 3	5134 – 5156 5231 – 5237 5240 – 5252 5351 – 5353 5355 – 5356 5360 5373 – 5374 5401 – 5417
Zone 4	5259 – 5301

#### **Installation Requirements:**

When installing the flexible ductwork system, the installer shall, at a minimum:

1. use silicone to seal around both the supply and return air starters to the indoor fan coil;
2. ensure the indoor fan coil be thoroughly cleaned with an appropriate coil cleaner;
3. ensure that the fan noise into the house be minimised with either 6 metres of return air duct or 3 metres of acoustically lined duct from the return air box to the indoor fan coil;
4. mechanically fix the ducting to prevent openings at joins over time;
5. duct tape the inner liner to the collar and ensure the insulation is pulled up over the collar before the outer is duct taped and mechanically fixed to minimize heat loss at the collar join;
6. ensure, where possible, that the air flow is balanced by using similar duct runs and bends after Y pieces. If manual damper blades are to be installed, they should be left in the fully open position and only adjusted where necessary, minimizing pressure loss in the system;

7. connect motorised dampers directly to collar Ys with at least 4 screws and duct tape must be placed over the joins, preventing air leakage in the future;
8. where possible, make the duct runs as short as possible to maximise airflow. There should be no kinks in the flexible duct and all duct should be hung by strapping where needed i.e.: over timbers etc.;
9. use curved duct supports such as flexright fittings on all outlets where possible, to minimize pressure losses at outlets as well as maximize throw of air; and
10. tape any small tears/holes in the outer or inner sleeve using foil tape for the outer sleeve and duct tape for the inner sleeve. Taping of any significant tears of more than one quarter of the circumference of the duct may not last and therefore that section of duct is no longer suitable and should be replaced.

**Guidance notes (not mandatory):**

## SCHEDULE 5. REES ACTIVITY RECORDS

In accordance with clause 5.2 of the Residential Energy Efficiency Scheme Code an **obliged retailer** must collect and record information specified in this Schedule 5 in relation to each **energy audit** and **energy efficiency activity** performed in respect of a **residential premises** at the time the activity is performed.

### General

- Retailer Id
- Transaction Id
- Installer Company Name
- Occupational Licence Number (where applicable)
- Certificate of Compliance Number (where applicable)
- Transaction Date
- Householder Details, including:
  - first name
  - surname
  - address
  - telephone number (if consent received from householder) and
  - email address (optional)
- Concession Type
- Household Type (owner occupied, private rental, public rental)
- A signed statement from the installer certifying that the activities have been undertaken in accordance with the minimum requirements of REES
- A signed statement from the householder certifying that the activities have been undertaken in the householder's premises and that a copy of the REES information statement has been left with the householder

### Energy Audits

- Auditor Id
- Audit Type (in home, interview, phone)

### Energy Efficiency Activities

Details collected under this section should relate to the minimum specification of the given **energy efficiency activity** undertaken. **Obliged retailers** should ensure that sufficient records are collected for reporting and audit purposes. Information collected must include at least the following:

- **Energy Efficiency Activity** (individual unit (type))
- Total units installed/supplied

In relation to Standby Power Controller (SPC activities):

- An additional signed statement from the householder and installer certifying that in relation to Standby Power Controller (SPC) activities:
  - If the SPC(s) does not have an inbuilt surge protection and is replacing a powerboard which did, then the resident has been advised specifically of this reduction in the level of protection.
  - The SPC has a minimum warranty period which has been stated to the resident.
  - The householder has been provided with adequate instruction on the working of the SPC(s), and provided with printed instructions including a helpline number.

## SCHEDULE 6. REES RESPONSIBILITY STATEMENT

In my opinion the information contained in the REES reporting statement provided to the Commission on [insert date] is true and accurate in accordance with the requirements of the Residential Energy Efficiency Scheme Code issued by the Essential Services Commission of South Australia, dated [version date].

Signed:

---

*[Insert Name]*

Position: 

---

Date: 

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# SCHEDULE 7. MINISTERIAL PROTOCOL

## Residential Energy Efficiency Scheme (REES)

### Protocol set by the Minister for Energy

November 2008

#### MAINTAINING THE LIST OF ENERGY EFFICIENCY ACTIVITIES

##### Introduction

The Minister for Energy has set the list of eligible energy efficiency activities (including deeming values and minimum specifications) for the purposes of the Residential Energy Efficiency Scheme (REES) by Notice in the Government Gazette on 30 October 2008 ("initial list").

Pursuant to regulation 7AN of Part 2AA *Electricity (General) Regulations 1997* under the *Electricity Act 1996*, and regulation 8DK of Part 2AA *Gas Regulations 1997* under the *Gas Act 1997*, the Essential Services Commission of South Australia (ESCOSA) has the function of maintaining, reviewing and amending this list. It must do this in accordance with any requirements set by the Minister for Energy.

This Protocol establishes the key principles and constraints which ESCOSA must have regard to in maintaining and reviewing the list of activities, their specifications and deeming values.

This Protocol is not intended to be exhaustive. In particular it is not intended to prescribe the process by which ESCOSA will maintain the list of activities. This is for ESCOSA to determine in its function as scheme administrator.

##### Timing constraints

- ESCOSA must not materially amend the initial list of activities as gazetted by the Minister for Energy within the first three years of operation of the REES.

Exception - the "Guidance Notes" section of each activity may be amended at any time to provide additional explanation where appropriate as the scheme evolves. Whilst retailers are encouraged to give consideration to these, they are not mandatory for compliance purposes.

- ESCOSA may add new activities at any time, provided these are consistent with the principles outlined in this document.
- ESCOSA must undertake a review of the whole of the list of activities once every three years. The first of these reviews must be completed prior to 1 July 2011, with changes not taking effect until 1 January 2012. The terms of reference for the review must be developed in consultation with the Department for Transport, Energy and Infrastructure.

##### Structure and format:

ESCOSA should have regard to, and seek to maintain, the structure and format used in the initial list of activities as gazetted by the Minister for Energy.

### Context for review

The purpose of maintaining and reviewing the list is to ensure it contains the most relevant activities and with appropriate specifications and deeming values. Key factors impacting on the list going forward will include:

- Existing and planned regulatory requirements - this landscape changes frequently, both at state and national levels, and impacts particularly on the extent to which REES activities result in “additional” savings beyond what would otherwise occur;
- Changing Australian standards – standards and best practice change, and new standards are introduced;
- Experience of implementation - the experience of REES participants in implementing activities in accordance with the minimum specifications, may inform the refinement of those specifications;
- Research – ongoing research will continue to inform activities, energy savings and deeming values;
- Changes in business as usual - for example, there is growing awareness of how household energy use and consumer choices impact on the environment. This is expected to contribute, in turn, to changes in habits, behaviours and choices going forward. Determining what is “additional” to this changing business as usual needs to be subject to ongoing review and analysis;
- Changing penetration potential - activities will reach a saturation point over time i.e. a point at which it is no longer practical to implement because most dwellings can be expected to have undertaken the activity;
- Tariff and cost increases – whether due to inflation, a price on carbon, or some other stimulus, energy prices are likely to rise going forward. This tends to improve the cost effectiveness of existing activities, and may make other activities more viable for implementation. Costs of undertaking activities also change over time;
- Technological changes and innovations – other opportunities to improve household energy efficiency are likely to emerge, and this may also make some existing activities more cost effective; and
- Appliance mix and energy use – the mix of household appliances and energy use practices changes markedly over time.

### General principles for all activities:

In reviewing existing activities, and in considering adding new activities, ESCOSA should have regard to the following key principles:

*Flexibility* – a range of different energy efficiency activities should be available for implementation.

*Additionality* – activities should encourage energy savings which are additional to that which would otherwise be achieved under current and planned regulatory requirements; and/or which is otherwise occurring through business as usual or consumer behaviour. This includes consideration of what barriers or market failures prevent further uptake of the activity.

*Verifiability* – potential energy and greenhouse savings from an activity should be robustly determined and verifiable, based on sound research applicable to the South Australia climate zone/s.



*Consistency of the saving* - there should be a high level of confidence that the estimated savings could be achieved in the majority of circumstances. For example, the activity does not predominantly rely on variable human behaviour or accurate use by the household; hardware is likely to remain in place rather than be uninstalled by the household; or implementation is the subject of defined standards which underpin quality assurance and consistency of performance.

*Penetration potential* – the activity should be technically capable of broad implementation and uptake by households within South Australia, within the Priority Group and/or non-Priority Group.

*Accessible and practical* – the activity should be accessible in the market and able to be practically and relatively easily implemented in the residential sector.

*Cost effectiveness* – benefits from the activity should be capable of cost effectively contributing to achievement of greenhouse gas reduction targets for South Australia (cost per tonne saved). Costs includes consideration of hardware and installation costs; program or administration costs in delivering the activity to households; the type and level of incentive likely to be required to encourage uptake; and access to government or other rebates to reduce costs. Savings include direct financial savings from reduced energy use and associated financial savings, such as water savings from water efficient showerheads.

*Other schemes* – ESCOSA should have regard to activities and specifications eligible in similar schemes in other state jurisdictions, striving for consistency wherever achievable and appropriate to allow synergies for participants operating in multiple jurisdictions. This should be regarded as secondary to all other principles.

#### Specific principles for calculating deeming values

Deeming values are typical greenhouse gas savings (tCO<sub>2</sub>-e) and must be informed by credible research, a defensible methodology and calculated having regard to the climate zone/s, typical housing stock, and energy use practices for South Australia. Calculations should include consideration of the following:

- Base case – current typical energy use where an inefficient product is used or where no efficient product is installed, using recognised benchmarks where available.
- Improvement on the base case – what, typically, would be the difference in energy use by installing or using an efficient product.
- Lifetime – the typical period of time the activity can realistically be expected to result in energy savings which are additional. To account for future uncertainties a maximum lifetime of 20 years should apply, although a longer lifetime may apply if substantiated through appropriate research findings.
- Adjustment factors – energy savings may need to be adjusted where it is necessary to account for, for example, the extent to which the energy savings will be taken as improved thermal comfort, likelihood of performance changes over time; changing business as usual, or planned future regulation.
- Climate zones – whether there is a material difference in the savings achieved when the activity is implemented in different South Australian climate zones.
- Greenhouse gas co-efficients, both current and projected over the life of the activity – these are as published by the Commonwealth Department of Climate Change.

### Specific principles for specifications

The purpose of the specifications is to maximise the energy saving and greenhouse benefits to households in implementing activities, and assist in ensuring the deemed savings are achievable in most, if not all, circumstances. Specifications should:

- Strike a balance between maximising achievement of savings; and minimising cost of compliance;
- Recognise that most activities are also subject to other requirements at law, for example, electrical installation and safety requirements;
- Require any hardware associated with an activity to be installed (i.e. no giveaways), except where it is considered that in most, if not all, circumstances installation will result (for example, with the current exchange of showerheads activity);
- Wherever appropriate, expressly exclude the potential for the activity to be undertaken where it is otherwise required by law, for example, as part of a development approval;
- Use existing Australia/New Zealand (AS/NZS) standards for installation, performance and safety, wherever applicable and appropriate for quality assurance, consistency of implementation and compliance;
- Have regard to health and safety implications of undertaking the activity in the residential sector, making explicit provision where necessary;
- Endeavour to ensure any inefficient products which are replaced or removed are taken out of circulation and preferably destroyed;
- Minimise the potential for perverse results through misuse of the scheme or its requirements;
- Encourage recycling and best practice; and
- Have regard to how activities are specified in other schemes, wherever appropriate, with this being secondary to all other factors.

### **REPORTING REQUIREMENTS**

Regulation 7AP of Part 2AA *Electricity (General) Regulations 1997* under the *Electricity Act 1996*, and regulation 8DM of Part 2AA *Gas Regulations 1997* under the *Gas Act 1997*, requires a retailer to report on compliance with the REES in accordance with any Code published by ESCOSA. The Minister for Energy may specify that this Code accord with certain requirements.

To facilitate ongoing evaluation of the scheme, and to inform future target setting, the Minister for Energy requires that ESCOSA collect information sufficient to advise on the following, for each calendar year of the REES:

- *Energy efficiency activities* - the number and household location of energy efficiency activities implemented. This includes a breakdown of benefiting households into Priority Group and non-Priority Group, and each of these groups by the nature of household tenure (owner-occupied, public rental, private rental);
- *Energy audits* - the type (in-home, phone or interview), number and household location of energy audits undertaken in Priority Group households. This includes a breakdown into the nature of household tenure (owner-occupied, public rental, private rental); and
- *Estimated penetration of the scheme*:
  - the total number of premises benefiting under the REES, recognising that some premises will receive multiple activities over the life of the scheme. This should be

- both an annual estimate and a cumulative estimate over the life of the scheme;  
and
- for each calendar year of the REES, an estimate of the total number of Priority Group and non-Priority Group premises benefiting under the scheme, and a breakdown by the nature of household tenure (owner-occupied, private rental, public rental).

## SCHEDULE 8. REPORTING SPECIFICATION

### *Data Item Specification*

In accordance with clause 5.4.2, **obliged retailers** are required to provide the **Commission** with a number of data items in the format specified in this Schedule 8 to ensure data is consistently formatted and able to be uploaded to the REES data management system.

It is an **obliged retailer's** responsibility to implement these data items accordingly into its REES information system.

### **Identifiers:**

**Obliged retailers** are assigned unique identifiers within the REES data management system. The list of unique identifiers for **obliged retailers** active in the South Australian electricity and gas retail markets at the commencement of the Residential Energy Efficiency Scheme Code is as follows:

NAME	ENERGY TYPE	FILENAME PREFIX
AGL SA	Electricity	AGLE
AGL SA	Gas	AGLG
Alinta Energy	Electricity	ALIE
Alinta Energy	Gas	ALIG
Aurora	Electricity	AURE
Australian Power &	Electricity	APGE
Australian Power &	Gas	APGG
Cogent Energy	Electricity	COGE
Country Energy	Electricity	CNTE
Diamond Energy	Electricity	DIEE
Dodo Power & Gas	Electricity	DPGE
Dodo Power & Gas	Gas	DPGG
Energy Australia	Electricity	ENAE
Energy Australia	Gas	ENAG
ERM Power Retail	Electricity	ERME
Flinders Power	Electricity	FPHE
Lumo Energy	Electricity	SAEE
Lumo Energy	Gas	SAEG
Momentum Energy	Electricity	MOME
Momentum Energy	Gas	MOMG
Origin Energy	Electricity	ORGE
Origin Energy	Gas	ORGG
Powerdirect	Electricity	PWRE
Red Energy	Electricity	REDE
Sanctuary Energy	Electricity	SANE
Santos Direct	Gas	SADG

Simply Energy	Electricity	SIME
Simply Energy	Gas	SIMG
TRUenergy	Electricity	TRUE
TRUenergy	Gas	TRUG
TRUenergy Yallourn	Electricity	TRYE
TrustPower Australia Holdings	Electricity	TAHE

#### Activities List:

Each **obliged retailer** will be provided with its own Activity List which captures all of the Energy Efficiency Activities published in the South Australian Government Gazette of 30 October 2008 and provided in Schedule 4 of the **Commission's** REES Code.

In the event that a new **Energy Efficiency Activity** is approved by the **Commission**, in accordance with clause 7.2 of the REES Code, **obliged retailers** will be provided with updated Activity codes.

Each **obliged retailer** Activity List has the following data items:

ITEM	DESCRIPTION
Name Prefix	The unique Retailer Filename Prefix as provided by the Commission.
Energy	Whether "Electricity" or "Gas".
Activity Abbreviation	The unique Activity Abbreviation Name identifier against which audits are reported.
Activity Title	The title of the Activity (for reference purposes).
UOM	Unit of measure Type for the Activity.
Effective Date	The date (format YYYY-MM-DD) from which the Activity is valid against a corresponding Transaction Date.
Expiry Date	The date (format YYYY-MM-DD) from which the Activity is no longer valid against a corresponding Transaction Date. If blank, then there is no expiry.

The data items are to be provided in the form of a Pipe (|) Separated Text File.

Example of 3 lines. The 1<sup>st</sup> line has an Effective Date and Expiry Date, the 2<sup>nd</sup> line and 3<sup>rd</sup> lines have an Effective Date only:

```
AGLE|Electricity|Shower Head Exchange|Shower Head Exchanged|Qty (units)|2008-12-31|2011-12-31
AGLE|Electricity|Shower Head Exchange 9L|9L Shower Head Exchanged|Qty (units)|2011-12-31||
AGLE|Electricity|Ductwk Cntrl Heater|Ductwork Central Heater|Qty (units)|2008-12-31||
```

**Types:**

In addition to the Activity List above, each **obliged retailer** will receive a list of “Types”. The complete list of Types for the initial setup will be supplied:

TYPE	VALUE
Concession	(No Concession)
“	Pensioner
“	TPI Gold - Repat
“	Gold - WW
“	Gold Repat - EDA
“	Health Care Card
“	SA Gov Energy
“	Hardship program
Households	Owner Occupied
“	Private Rental
“	Public Rental
UOM	Qty (units)
“	Area (m2)
“	Length (m)
Audit-types	In-home
“	Interview
“	Phone

The list will be supplied as text file in the following Pipe (|) separated format:

**RetailerTypesList:**

Concession|(No Concession)  
 Concession|Gold Rep Health Card  
 Concession|CW HealthCard inc LI  
 Concession|CW Pensioner Card  
 Concession|CW TPI GoldRep HthCd  
 Concession|CW WWs GoldRep Card  
 Concession|SA Gov Energy Card  
 Concession|Hardship Program  
 Households|Owner Occupied  
 Households|Private Rental  
 Households|Public Rental  
 UOM|Qty (units)  
 UOM|Area (m2)  
 UOM|Length (m)  
 Audit Types|In-home  
 Audit Types|Interview  
 Audit Types|Phone

### ***Format of Files sent to the Commission***

**Obligated retailers** will submit two text files, one of Activities and one of Audits, to the **Commission** on a quarterly basis (as provided in the **Commission's** REES Code). One file is the results of Activities undertaken and the other a list of Audits undertaken. The files are to be submitted by email to the **Commission**.

The files are to be in the form of a Pipe (|) Separated Text File.

Each row (i.e. line) in the files is to be separated by the carriage-return and line-feed character combination.

#### **Filename Format:**

The files are to be named in the following format:

<Name Prefix>\_<Issued Date>\_<Content Type>.txt

where:

<Name Prefix>	The unique Retailer Filename Prefix as provided by the Commission
<Issued Date>	The Issued Date of the file. The date format is: YYMMDD
<Content Type>	Either word "Activities" or "Audits" accordingly

Examples:

ABCD\_081001\_Activities.txt

ABCD\_081001\_Audits.txt

### Energy Efficiency Activities Text File Format:

DATA ITEM	DESCRIPTION
Header Row (the first row/line in the file)	
Header Flag	Value "H".
Type	Value "Activities".
Retailer Name Prefix	The unique Retailer Filename Prefix (described above).
Issued Date	The Issued Date in the format YYMMDD as per the filename component above.
Detail Rows	
Activity Abbreviation	The Activity Abbreviation identifier (described above).
Household Type	The "Household" Value (described above).
Concession Type	The "Concession" Value (described above).
Quantity	The audit quantity (without comma thousands separators).
UOM	The UOM (described above).
Address	<p>The address (address lines concatenated by commas) of where the activity was carried.</p> <p>Do not submit client names.</p> <p>Do not submit "Attention To" type data.</p> <p>Use abbreviations for street suffix, floor, unit, etc.</p> <p>Ensure address is formatted as best as possible to Australia Post address formatting standards.</p>
Transaction Date	The Transaction Date in the format YYMMDD.
Retailer's Transaction ID	The Retailer's Transaction ID for the entry (max 25 characters).
Trailer Row (the last row/line in the file)	
Trailer Flag	Value "T".
Type	Value "Activities".
Retailer Name Prefix	The unique Retailer Filename Prefix (described above).
Detail Rows Count	The total number of Detail Rows in the file (without thousands separators).

### Example:

H|Activities|ABCD|081001  
 Ceiling Insuln Inst|Owner Occupied|(No Concession)|20.5|Area (m2)|L 8 50 Pirie St, Adelaide SA 5000|080721|XYZ1  
 CFL 10+K NonRf 23+W|Owner Occupied|(No Concession)|6|Qty (units)|L 8 50 Pirie St, Adelaide SA 5000|080722|XYZ2  
 T|Activities|ABCD|2



**Energy Audits Text File Format:**

DATA ITEM	DESCRIPTION
Header Row (the first row/line in the file)	
Header Flag	Value "H".
Type	Value "Audits".
Retailer Name Prefix	The unique Retailer Filename Prefix (described above).
Issued Date	The Issued Date in the format YYMMDD as per the filename component above.
Detail Rows	
Household Type	The "Household" Value (described above).
Concession Type	The "Concession" Value (described above).
Audit Type	The "Audit Type" Value (described above).
Address	<p>The address (address lines concatenated by commas) of where the audit was carried.</p> <p>Do not submit client names.</p> <p>Do not submit "Attention To" type data.</p> <p>Use abbreviations for street suffix, floor, unit, etc.</p> <p>Ensure address is formatted as best as possible to Australia Post address formatting standards.</p>
Transaction Date	The Transaction Date in the format YYMMDD.
Retailer's Transaction ID	The Retailer's Transaction ID for the entry (max 25 characters).
Retailer's Auditor ID	The Retailer's Auditor ID for the entry (max 25 characters).
Trailer Row (the last row/line in the file)	
Trailer Flag	Value "T".
Type	Value "Audits".
Retailer Name Prefix	The unique Retailer Filename Prefix (described above).
Detail Rows Count	The total number of Detail Rows in the file (without thousands separators).

**Example:**

H|Audits|ABCD|081001  
 Owner Occupied|(No Concession)|In-home|L 8 50 Pirie St, Adelaide SA 5000|080721|XYZ10|A1  
 Owner Occupied|(No Concession)|Phone|L 6 200 Victoria Sq, Adelaide SA 5000|080722|XYZ11|A1  
 T|Audits|ABCD|2

*End of Document*

## SCHEDULE 9. STATISTICAL INFORMATION

In accordance with clause 5.4.3, all **energy retailers** are required to complete the following Annual Return for the provision of general operational statistics to the **Commission**, with the appropriate officer completing the responsibility statement below.

### Statistical Information Proforma

Financial Year .... [insert period]	Electricity	Gas
Total number of South Australian <b>residential customers</b> as at 30 June .... [insert year] <sup>(1)</sup>		
Total sales to South Australian <b>residential customers</b> for financial year <sup>(2)</sup>	(MWh)	(GJ)

### Responsibility Statement

Having reviewed this Annual Return containing the operational results of ..... [insert name of **energy retailer**] in my opinion the data provided in this report are true and accurate.

Signed:

\_\_\_\_\_

Name of Chief Executive<sup>(3)</sup>

\_\_\_\_\_

(please print)

Energy retailer:

\_\_\_\_\_

(please print name of retailer)

Date:

\_\_\_\_\_

When completed, this return should be sent to the **Commission** either in hard copy to GPO Box 2605, Adelaide SA 5001 or via email to [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au) <sup>(4)</sup>. Please note that this return needs to be received no later than **31 August** of the relevant year, to enable the **Commission** to advise individual REES targets for the subsequent year by 31 October.

Notes:

- (1) Required under clause 5.4.3(a)&(b). Definition of customer to be consistent with that used by **NERL retailers** in reporting to the Australian Energy Regulator (AER) under AER reporting guidelines (e.g. *AER (Retail Law) Performance Reporting Procedures and Guidelines, June 2012, version 2*).
- (2) Required under clause 5.4.3(c)&(d). Financial year to be the same as stated in the heading to the column. Sales data must comply with the requirements of clause 5.4.4(b).
- (3) Or equivalent per clause 5.4.5.
- (4) Providing the emailed version consists of a Portable Document Format (PDF) of the entire return as a single PDF file, including a signed responsibility statement.



The Essential Services Commission of South Australia

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