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GOVERNMENT NOTICES

Miscellaneous Instruments

CRIMES (ADMINISTRATION OF SENTENCES) ACT 1999

GOVERNOR

I, General The Honourable David Hurley AC DSC (Ret'd), Governor of the State of New South Wales, with the advice of the Executive Council, and pursuant to section 225 (4) of the *Crimes (Administration of Sentences) Act 1999*, do, by this Proclamation, vary the proclamation of the South Coast Correctional Centre published in the *Government Gazette* on 3 December 2010; and in variation thereof, I declare the South Coast Correctional Centre to be the area comprised within the boundaries hereunder (together with all buildings or premises which are now or may hereafter be erected thereon) viz.:

All that piece or parcel of land situate in the local government area of Shoalhaven City, Parish of Nowra and County of St Vincent, being part of lot 1 Deposited Plan 1158359, shown by the shading on Plan Catalogue No 57350 in the Plan Room of the NSW Department of Finance, Services & Innovation, reproduced hereunder and having an area of 13.85 hectares or thereabouts.

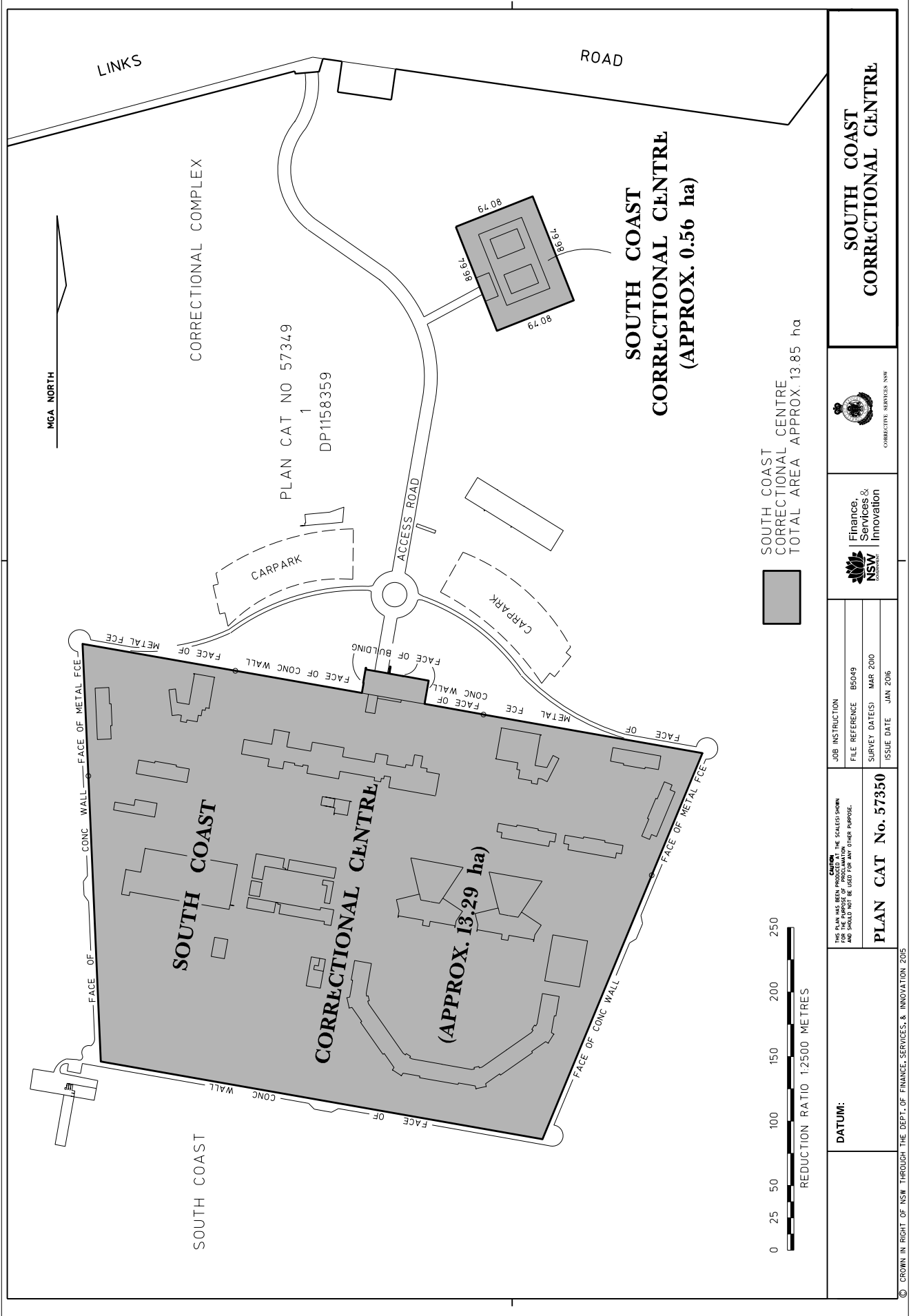
This proclamation is to take effect on and from the date of publication in the *NSW Government Gazette*.

Signed and sealed at Sydney, this 23rd day of March 2016.

By His Excellency's Command,

DAVID ELLIOTT, MP
Minister for Corrections

GOD SAVE THE QUEEN!



<p>SOUTH COAST CORRECTIONAL CENTRE</p>		<p>CORRECTIVE SERVICES NSW</p>	<p>Finances, Services & Innovation</p>	<p>PLAN CAT No. 57350</p>	<p>JOB INSTRUCTION</p>	<p>FILE REFERENCE B5049</p>	<p>SURVEY DATE(S) MAR 2010</p>	<p>ISSUE DATE JUN 2016</p>
					<p>THE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE SALES ACT 1969 AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.</p>			
<p>DATUM:</p>		<p>© CROWN IN RIGHT OF NSW THROUGH THE DEPT. OF FINANCE, SERVICES, & INNOVATION 2015</p>						

CRIMES (ADMINISTRATION OF SENTENCES) ACT 1999

GOVERNOR

I, General The Honourable David Hurley AC DSC (Ret'd), Governor of the State of New South Wales, with the advice of the Executive Council, and pursuant to section 224 (3) of the *Crimes (Administration of Sentences) Act 1999*, do, by this Proclamation, vary the proclamation of the South Coast Correctional Complex published in the *Government Gazette* on 3 December 2010; and in variation thereof, I declare the South Coast Correctional Complex to be the area comprised within the boundaries hereunder (together with all buildings or premises which are now or may hereafter be erected thereon) viz.:

All that piece or parcel of land situate in the local government area of Shoalhaven City, Parish of Nowra and County of St Vincent, being lot 1 Deposited Plan 1158359, shown by the shading on Plan Catalogue No 57349 in the Plan Room of the NSW Department of Finance, Services & Innovation, reproduced hereunder and having an area of 101.4 hectares or thereabouts.

This proclamation is to take effect on and from the date of publication in the *NSW Government Gazette*.

Signed and sealed at Sydney, this 23rd day of March 2016.

By His Excellency's Command,

DAVID ELLIOTT, MP
Minister for Corrections

GOD SAVE THE QUEEN!

NOTICE OF APPROVAL OF ENERGY SAVINGS SCHEME (AMENDMENT NO 1) RULE 2016

under the

ELECTRICITY SUPPLY ACT 1995

I, Anthony Roberts, Minister for Industry, Resources and Energy, pursuant to section 167 (4) of the *Electricity Supply Act 1995*, hereby approve the *Energy Savings Scheme (Amendment No 1) Rule 2016* (Amending Rule) attached to this notice.

The Amending Rule commences on 15 April 2016 and amends the *Energy Savings Scheme Rule of 2009*.

This notice of approval of the Amending Rule is provided pursuant to section 167 (5) of the *Electricity Supply Act 1995*.

A copy of the amended *Energy Savings Scheme Rule of 2009* may also be obtained through the NSW Department of Industry, Resources and Energy website at <http://www.resourcesandenergy.nsw.gov.au/energy-consumers/sustainable-energy/efficiency/scheme>.

Dated this 4th day of April 2016.

The Hon ANTHONY ROBERTS, MP
Minister for Industry, Resources and Energy

ENERGY SAVINGS SCHEME (AMENDMENT NO 1) RULE 2016

under the
ELECTRICITY SUPPLY ACT 1995

1. Name of Rule

This Rule is the Energy Savings Scheme (Amendment No 1) Rule 2016.

2. Operation of Rule

This Rule amends the Energy Savings Scheme Rule 2009. The amended Energy Savings Scheme Rule 2009 is set out in Schedule 1 of this Rule.

3. Commencement

This Rule commences on 15 April 2016.

SCHEDULE 1

Energy Savings Scheme Rule of 2009

The Hon Anthony Roberts, MP
Minister for Industry, Resources and Energy

Simplified outline

The following is a simplified outline of this Rule:

- clauses 1-4 set out the commencement of the Rule, the objects of the Rule, the application of the Rule, and status and operation of the Rule.
- clause 5 sets out the definitions of Energy Saver and Recognised Energy Saving Activity and eligibility requirements for accreditation as an Accredited Certificate Provider.
- clause 6 sets out the conditions on the creation of Energy Savings Certificates under the Rule.
- clause 7 sets out the calculation method for determining Energy Savings under the Project Impact Assessment Method.
- clause 7A sets out the calculation method for determining Energy Savings under the Project Impact Assessment with Measurement and Verification Method.
- clause 8 sets out the calculation method for determining Energy Savings under the Metered Baseline Method using one of the following sub-methods:
 - Baseline per unit of output (clause 8.5)
 - Baseline unaffected by output (clause 8.6)
 - Normalised baseline (clause 8.7)
 - NABERS baseline (clause 8.8)
 - Aggregated Metered Baseline (clause 8.9)
- clause 9 sets out the calculation method for determining Energy Savings under the Deemed Energy Savings Method using one of the following sub-methods:
 - Sale of New Appliances (clause 9.3)
 - Commercial Lighting Energy Savings Formula (clause 9.4)
 - Public Lighting Energy Savings Formula (clause 9.4A)
 - High Efficiency Motor Energy Savings Formula (clause 9.5)
 - Power Factor Correction Energy Savings Formula (clause 9.6)
 - Removal of Old Appliances (clause 9.7)
 - Home Energy Efficiency Retrofits (clause 9.8)

- Installation of High Efficiency Appliances for Businesses (clause 9.9)
- ‘1 for 1’ Residential Downlight Replacement (clause 9.10)
- clause 10 sets out the definitions and interpretation provisions.
- clause 11 sets out savings and transitional arrangements relating to the amendment of this Rule.
- Schedule A sets out Default Factors and Classifications.
- Schedule B sets out activity definitions for the Sale of New Appliances (clause 9.3)
- Schedule C sets out activity definitions for the Removal of Old Appliances (clause 9.7)
- Schedule D sets out activity definitions for General Activities for Home Energy Efficiency Retrofits (clause 9.8)
- Schedule E sets out activity definitions for Low Cost Activities for Home Energy Efficiency Retrofits (clause 9.8)
- Schedule F sets out activity definitions for the Installation of High Efficiency Appliances for Businesses (clause 9.9)
- Schedule G sets out the activity definition for ‘1 for 1’ Residential Downlight Replacement (clause 9.10)

1 Name and commencement

1.1 This Rule is the *Energy Savings Scheme Rule of 2009* and commences on 15 April 2016, with the following exception:

- (a) Activities D6, D7, D8 and D9 (Insulation) of Schedule D commence on a date notified by the Minister responsible for the Act by notice published in the NSW Government Gazette.

2 Objects of the Rule

2.1 The object of this Rule is to provide specific arrangements for the creation and calculation of Energy Savings Certificates where energy is saved, with no negative effect on production or service levels, through increased efficiency of electricity consumption or Gas consumption or both, or reduction in electricity consumption or Gas consumption or both. The Rule aims to save energy through measures that improve electricity end-use efficiency or Gas end-use efficiency or both.

3 Application of the Rule

3.1 This Rule applies to Accredited Certificate Providers accredited to create Energy Savings Certificates in respect of Recognised Energy Saving Activities in accordance with Part 9 Division 8 of the Act, the Regulations and this Rule.

3.2 For the avoidance of doubt, unless expressly provided otherwise, this Rule applies to the calculation of Energy Savings used to create Energy Savings Certificates for which an application for registration is made on or after 15 April 2016.

4 Status and Operation of the Rule

4.1 This Rule is an Energy Savings Scheme Rule made under Part 9 Division 13 of the Act.

5 Definitions of Energy Saver and Recognised Energy Saving Activity and Eligibility Requirements

Note: Other definitions of terms used in this document are set out at clause 10.

5.1 (deleted)

Energy Saver

5.2 The Energy Saver with respect to Energy Savings arising from a Recognised Energy Saving Activity, as calculated according to a calculation method in this Rule, is either:

- (a) the person defined as the Energy Saver in the relevant calculation method, provided that, as at the relevant Implementation Date, that person has not nominated another person to be the Energy Saver for those Energy Savings in accordance with clause 5.2 (b); or
- (b) the person nominated to be the Energy Saver by the person in clause 5.2 (a), provided that:
- (i) the nomination has been made in a form and manner approved by the Scheme Administrator; and
- (ii) as at the relevant Implementation Date, another person has not been nominated as the Energy Saver with respect to the same Energy Savings.

Recognised Energy Saving Activity

- 5.3 A Recognised Energy Saving Activity is any activity that meets all of the following criteria:
- (a) it increases the efficiency of energy consumption, by:
 - (i) modifying End-User Equipment or the usage of End-User Equipment (including by installing additional components) with the result that there is a reduction in the consumption of energy compared to what would have otherwise been consumed;
 - (ii) replacing End-User Equipment with other End-User Equipment that consumes less energy, subject to clause 5.3B;
 - (iii) installing New End-User Equipment that consumes less energy than other comparable End-User Equipment of the same type, function, output or service, subject to clause 5.3A; or
 - (iv) removing End-User Equipment with the result that there is a reduction in the consumption of energy compared to what would have otherwise been consumed, subject to clause 5.3A; and
 - (b) it does not result in a reduction in energy consumption by reducing production or service levels (including safety levels); and
 - (c) it is implemented at a Site or Sites in an ESS Jurisdiction; and
 - (d) it is not unlawful to carry out the activity in that ESS Jurisdiction as at the Implementation Date; and
 - (e) it increases the efficiency of the energy consumption by:
 - (i) increasing the efficiency of electricity consumption;
 - (ii) increasing the efficiency of consumption of a Gas, where the Gas is combusted for stationary energy;
 - (iii) fuel switching from electricity to Gas, or Gas to electricity; or
 - (iv) generating electricity where the electricity is used to provide equivalent goods or services, with the result that there is an overall reduction in the consumption of energy compared to what would have otherwise been consumed, subject to clause 5.4(i).
- 5.3A The replacement or removal of End-User Equipment only constitutes a Recognised Energy Saving Activity if the Accredited Certificate Provider:
- (a) does not refurbish, re-use or resell that End-User Equipment; and
 - (b) if the Implementation Date is on or after 15 May 2016, disposes of that End-User Equipment appropriately, such that:
 - (i) if the postcode of the Implementation is in a Metropolitan Levy Area listed in Table A25, any lighting End-User Equipment containing mercury must be recycled in accordance with the recycling requirements of a Product Stewardship Scheme; and
 - (ii) recycling evidence is obtained for any refrigerants being disposed of, such as a tax invoice or a recycling receipt, or any other evidence acceptable to the Scheme Administrator.
- Note:** any refrigerants in the End-User Equipment must be disposed of in a manner that is compliant with the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.
- 5.3B The installation of New End-User Equipment only constitutes a Recognised Energy Saving Activity if the Scheme Administrator is satisfied that the efficiency of energy consumption of the New End-User Equipment is greater than the average energy efficiency of End-User Equipment that provides the same

type, function, output or service. For these purposes, the energy efficiency of End-User Equipment may be estimated by reference to:

- (a) baseline efficiency for that class of End-User Equipment which may, from time to time, be Published by the Scheme Administrator;
- (b) sales-weighted market data for that class of End-User Equipment collected from installers, retailers, distributors or manufacturers; or
- (c) product-weighted averages of Products registered as complying with an AS/NZS that defines how energy efficiency is to be measured for that class of End-User Equipment.

Activities which are not Recognised Energy Saving Activities

5.4 Recognised Energy Saving Activities do not include any of the following:

- (a) the installation of End-User Equipment defined as a:
 - (i) T5 Adaptor kit in Table A9.3 of Schedule A; or
 - (ii) Retrofit Luminaire-LED Linear Lamp in Table A9.3 of Schedule A;
- (b) an activity undertaken in order to comply with any mandatory legal requirement imposed through a statutory or regulatory instrument of any jurisdiction, including, but not limited to, compliance with BASIX and BCA requirements;
- (c) an activity of a Network Service Provider that satisfies a regulatory investment test under the National Electricity (NSW) Law or rules made under it, disregarding the value of financial incentives provided by the Energy Savings Scheme;
- (d) the supply of electricity by an Electricity Retailer, or the purchase of electricity from an Electricity Retailer by a customer, from the Electricity Network, under a representation by the Electricity Retailer that there is a reduction in greenhouse gas emissions because the electricity supplied is connected with, or represents an amount equal to, the generation of electricity from a particular energy source. This includes but is not limited to purchases of GreenPower;

Note: This excludes activities involving the purchase of electricity under “GreenPower” accredited or similar schemes that are eligible to create certificates or Renewable Energy Certificates at the point of generation.

- (e) an activity that results in a reduction in the consumption of energy by reducing production or service levels (including safety levels);

Note: Reduced energy consumption not directly due to specific actions to improve efficiency does not qualify as a Recognised Energy Saving Activity. Mild weather, lower production, closing down part of a Site, or reducing the quality or quantity of service derived from the use of that energy do not qualify as a Recognised Energy Saving Activity.

Reducing energy consumption where there is no negative effect on production or service levels (e.g. reduction of excessive lighting, removal of redundant installed capacity or the installation of more energy efficient equipment) is a Recognised Energy Saving Activity and is not excluded by this clause.

- (f) an activity that reduces energy consumption by increasing consumption of non-renewable fuels (other than Gas) to provide equivalent goods or services;

- (g) an activity that is eligible to create tradeable certificates under the *Renewable Energy (Electricity) Act 2000 (Cth)*;
- (h) an activity that increases the efficiency of Gas consumption and results in flaring of Gas;
- (i) an activity that reduces energy consumption by generating electricity from any source where:
 - (i) the generated electricity is exported to the Electricity Network; or
 - (ii) the generating system has a nameplate rating of 5 MW or higher;
- (j) a fuel switching activity under clause 7A, clause 8.5, clause 8.6 or clause 8.7 that leads to a net increase in greenhouse gas emissions, where greenhouse gas emissions are calculated using Electricity Savings, Gas Savings, and full fuel cycle emissions factors and equations from the current version of the National Greenhouse Accounts Factors.

5.5 For the purposes of clause 5.3, a Recognised Energy Saving Activity may:

- (a) involve multiple Activity Definitions or items of End-User Equipment; and
- (b) occur at a single Site or across multiple Sites where each Implementation has an Implementation Date; and
- (c) be delivered by Implementations with the same or different Implementation Dates.

Eligibility for accreditation

5.6 A person is only eligible for accreditation as an Accredited Certificate Provider if the person is a suitable person to be so accredited.

5.7 In considering the suitability of a person to be accredited as an Accredited Certificate Provider, the Scheme Administrator may take into account such matters as it thinks relevant, including:

- (a) previous commercial dealings of the person and its associates; and
- (b) the standard of honesty and integrity shown in previous commercial dealings of the person and its associates.

5.8 In clause 5.7, "associate", in relation to a person, has the same meaning it would have under Division 2 of Part 1.2 of the Corporations Act 2001 of the Commonwealth if only sections 10, 11, 12(2), 12(5), 15 and 16(1) formed part of that Division.

6 Creation of Energy Savings Certificates

Note: Only Accredited Certificate Providers may create Energy Savings Certificates (section 134 of the Act).

6.1 (deleted)

6.2 An Accredited Certificate Provider may only create Energy Savings Certificates in respect of the Energy Savings for an Implementation where:

- (a) the Accredited Certificate Provider is the Energy Saver for those Energy Savings as at the Implementation Date; and
- (b) the Accredited Certificate Provider's Accreditation Date for that Recognised Energy Saving Activity is prior to the Implementation Date.

- 6.3 (deleted)
- 6.4 An Accredited Certificate Provider may not create Energy Savings Certificates in respect of any Energy Savings for which Energy Savings Certificates have already been created.
- 6.5 An Accredited Certificate Provider may only create a certain Number of Certificates in respect of the Energy Savings arising from a Recognised Energy Saving Activity, calculated in accordance with **Equation 1**.

Equation 1

$$\text{Number of Certificates} = \sum_{\text{Implementations}} \text{Electricity Savings} \times \text{Electricity Certificate Conversion Factor} + \text{Gas Savings} \times \text{Gas Certificate Conversion Factor}$$

Where:

- *Number of Certificates* is rounded down to a whole number of Energy Savings Certificates;
- the summation is across the Energy Savings arising from one or more Implementations of the Recognised Energy Saving Activity;
- *Electricity Savings and Gas Savings* are the Electricity Savings and Gas Savings respectively, in MWh, arising from each Implementation as calculated according to (as relevant):
 - the Project Impact Assessment Method (clause 7);
 - the Project Impact Assessment with Measurement and Verification Method (clause 7A);
 - the Metered Baseline Method (clause 8); or
 - the Deemed Energy Savings Method (clause 9).
- *Electricity Certificate Conversion Factor* is 1.06, as specified in section 130(1) of the Act, or as amended by Regulation.
- *Gas Certificate Conversion Factor* is 0.39, as specified in section 130(1) of the Act, or as amended by Regulation.

Note: For fuel switching activities, either Gas Savings or Electricity Savings may be negative. Energy Savings Certificates may only be created where the result of Equation 1 is a positive number.

- 6.5A The method used to calculate the Energy Savings arising from a Recognised Energy Saving Activity must:
- (a) be approved by the Scheme Administrator before any Energy Savings Certificates are created using that method. For the purposes of such an approval, the Scheme Administrator may impose additional conditions in respect of the use or application of that method; and
 - (b) produce a result reasonably reflecting, to the satisfaction of the Scheme Administrator, the Energy Savings arising from that Implementation.
- 6.5B Energy Savings may be totalled over more than one Implementations of the same Recognised Energy Saving Activity to create one or more Energy Savings Certificates.

- 6.5C Any Implementation that meets all of the Equipment Requirements, Eligibility Requirements and Implementation Requirements for the relevant Recognised Energy Saving Activity on the Implementation Date, is deemed to meet the requirements of this Rule for Energy Savings Certificate creation, unless otherwise advised in writing by the Scheme Administrator.
- 6.6 (deleted)
- 6.7 (deleted)
- 6.8 For the purpose of applying to register the creation of Energy Savings Certificates for one or more Implementations, an Accredited Certificate Provider must provide the following data to the Scheme Administrator in a manner and form determined by the Scheme Administrator:
- (a) the Accredited Certificate Provider identifier;
 - (b) the Recognised Energy Saving Activity identifier;
 - (c) the Address of the Site or Sites where the Implementation(s) took place;
 - (d) any other identifiers required to identify the Site or Sites where the Implementation(s) took place;
 - (e) the Implementation Date of the Implementation(s);
 - (f) the Electricity Savings, Regional Network Factor applied and Gas Savings for each Implementation, and the estimated percentage of each attributable to fuel switching from electricity to Gas, and Gas to electricity;
 - (g) the Australian Business Number of the entity utilising the End-Use Service, where applicable;
 - (h) the cost to the person who pays for the goods or services that comprise the Implementation, excluding GST;
 - (i) the type of the End-Use Service for which energy was saved, if known, in accordance with Table A17 of Schedule A;
 - (j) the Business Classification of the entity utilising the End-Use Service, if known, in accordance with Table A18 of Schedule A; and
 - (k) any other data providing evidence of Energy Savings from the Implementation as specified and required by the Scheme Administrator.
- 6.9 Before registering the creation of an Energy Savings Certificate, the Scheme Administrator may review the data provided in accordance with clause 6.8 to ensure that the calculation of the Energy Savings used to create the Energy Savings Certificate is based on complete data.

Note: An Energy Savings Certificate has no force or effect until the creation of the certificate is registered by the Scheme Administrator (section 143 of the Act).

7 Project Impact Assessment Method

Note: The Project Impact Assessment Method may only be used to “forward create” (under clause 7.4.4) or “top-up” (under clause 7.4.6) Energy Savings Certificates in relation to Implementations with an Implementation Date on or before 30 October 2015.

The Project Impact Assessment Method may only be used for “annual creation” (using Equation 2) to create Energy Savings Certificates in relation to Implementations with an Implementation Date on or before 15 April 2016.

7.1 Energy Savings under the Project Impact Assessment Method

- (a) An Accredited Certificate Provider may only use the Project Impact Assessment Method to calculate the Energy Savings of Implementations if the Accredited Certificate Provider is authorised, on or before 30 September 2014, to use clause 7 to calculate those Energy Savings under its accreditation conditions.
- (b) (deleted)
- (c) Energy Savings calculated in accordance with clause 7.4.4 or 7.4.6, may only be used to create Energy Savings Certificates where those Energy Savings are for Implementations with an Implementation Date on or before 30 October 2015.
- (d) Using the Project Impact Assessment Method, the Energy Savings of an Implementation may be calculated using **Equation 2**, where:
- (i) those Energy Savings are for Implementations with an Implementation Date on or before 15 April 2016; and
 - (ii) those Energy Savings are for a maximum period of 10 years after the Implementation Date.

Equation 2

Electricity Savings = Reduced Electricity Consumption x Confidence Factor

Where:

- *Reduced Electricity Consumption* is the extent to which the electricity consumption of the equipment, process, or system is, as a consequence of the Recognised Energy Saving Activity, different to what it otherwise would have been, and is to be calculated in accordance with the engineering assessment in clause 7.2; and
- *Confidence Factor* is the number determined in accordance with clause 7.3 (depending on the type of engineering assessment performed).

7.2 Engineering assessment of reduced electricity consumption

Accredited Certificate Providers using the Project Impact Assessment Method in respect of any Recognised Energy Saving Activity must calculate the reduced electricity consumption of only the equipment, process, or system that is the subject of the Recognised Energy Saving Activity using an engineering assessment or model:

- (a) that uses reasonable assumptions and generally accepted engineering methods, models, and formulae;
- (b) in which the methods, models and formulae used to assess the Recognised Energy Saving Activity are chosen by the Accredited Certificate Provider, but the assessment is assigned a Confidence Factor under clause 7.3 reflecting the accuracy of the engineering assessment conducted; and
- (c) that takes account of:
- (i) the consumption of the existing equipment, systems or processes, or for the purposes of clause 5.3B, the average energy efficiency of comparable New End-User Equipment as described in that clause;
 - (ii) the performance of the equipment, systems or processes, including degradation over time;

- (iii) the operating characteristics of the equipment, systems or processes, including hours of use, degree of loading, usage, operating patterns and behaviour, ambient conditions and any other relevant factors; and
- (iv) any of the factors or constants used in a Deemed Energy Savings Method under clause 9, if the variable that the value represents is relevant to the assessment or, if the Accredited Certificate Provider proposes to use a different value for the same purpose, that value is acceptable to the Scheme Administrator.

7.3 Confidence Factor

The Confidence Factor is:

- (a) 1.0, if the engineering assessment determines energy consumption to a high level of accuracy based on logged or equivalent data from the End-User Equipment such as:
 - (i) hours of operation for the End-User Equipment determined from measurements taken over time or other logged data, or a simpler method where this yields an equivalent level of accuracy;
 - (ii) allowances for any variance in input characteristics and usage, degree of loading, or output characteristics for the End-User Equipment over time determined from measurements or other logged data, or a simpler method where this yields an equivalent level of accuracy;
 - (iii) operating environment and ambient conditions over time for the End-User Equipment determined from measurements or other logged data, or a simpler method where this yields an equivalent level of accuracy;
 - (iv) End-User Equipment characteristics using a full performance curve from manufacturers' or measured data, or a simpler method where this yields an equivalent level of accuracy; and
 - (v) performance degradation of the End-User Equipment over time using detailed calculations and manufacturers' or measured degradation characteristics, or a simpler method where this yields an equivalent level of accuracy, (including where the engineering assessment relies upon factors or constants used in a Deemed Energy Savings method set out in this Rule);

or,

- (b) 0.9, if the engineering assessment determines energy consumption to a lesser level of accuracy from that described in clause 7.3(a), based on estimations from logged data, records or equivalent data such as:
 - (i) hours of operation for the End-User Equipment estimated from records, or a simpler method where this yields an equivalent level of accuracy;
 - (ii) allowances for any variance in input characteristics and usage, degree of loading, or output characteristics for the End-User Equipment over time estimated from records, or a simpler method where this yields an equivalent level of accuracy;
 - (iii) operating environment and ambient conditions over time estimated for the End-User Equipment from records or average measurements, or a simpler method where this yields an equivalent level of accuracy;
 - (iv) End-User Equipment characteristics taking account of performance at full and part load or discrete operating modes, or a simpler method where this yields an equivalent level of accuracy; and
 - (v) estimates of performance degradation of the End-User Equipment over time using manufacturers' or other representative degradation characteristics, or a simpler method where this yields an equivalent level of accuracy,

or,

- (c) 0.8, or another value approved by the Scheme Administrator, if the engineering assessment does not meet the level of accuracy set out in clause 7.3 (a) or (b).

7.4 Energy Savings able to be brought forward using the Project Impact Assessment Method

Note: Section 131 of the Act provides that the Rules may specify when Energy Savings arising from a Recognised Energy Saving Activity are considered to have occurred.

Therefore, under the Rule, Accredited Certificate Providers may elect to ‘forward create’ Energy Savings Certificates by deeming Energy Savings which will cumulatively occur for a future period, to have occurred on the Implementation Date or a later date per the requirements of clause 7.4.3. However, a discount will be applied to the calculation of those Energy Savings.

- 7.4.1 For the purposes of section 131 of the Act, an Accredited Certificate Provider may elect for future Energy Savings for an Implementation to be deemed to have occurred on a date determined in accordance with clause 7.4.3.
- 7.4.2 The time period of future Energy Savings for an Implementation which may be deemed to have occurred on a date determined by clause 7.4.3, must be set such that:
- (a) the period does not exceed 5 years;
 - (b) the sum of all time periods of future Energy Savings for an Implementation does not exceed the life of the Implementation (in years) determined by the Accredited Certificate Provider, to the satisfaction of the Scheme Administrator, with reference to:
 - (i) the number of Energy Savings Certificates that are otherwise eligible to be created over a given period, determined in accordance with this Rule and to the satisfaction of the Scheme Administrator;
 - (ii) any likely performance degradation of the End-User Equipment that will tend to result in Energy Savings in one period being lower than Energy Savings in preceding periods of equal duration; and
 - (iii) the expected lifetime of the End-User Equipment, taking into account its characteristics, usage and typical frequency of replacement assuming that the use of the Site and End-User Equipment remains the same; and
 - (c) the end date of the period is not later than 10 years after the Implementation Date.
- 7.4.3 If an Accredited Certificate Provider makes the election in clause 7.4.1, the date on which the Energy Savings for that Implementation are deemed to occur is the later of:
- (a) the Implementation Date; and
 - (b) in respect of an Implementation prior to 1 July 2014, the first date by which all the Energy Savings previously brought forward under clause 7.4.1 to create Energy Savings Certificates in respect of the same Recognised Energy Savings Activity have actually occurred.
- 7.4.4 The amount of Energy Savings deemed to occur on the date determined by clause 7.4.3 must be calculated in accordance with the method set out in **Equation 3**.

Equation 3

$$\text{Electricity Savings} = \text{Reduced Electricity Consumption}_n \times \text{Confidence Factor} \times \text{Decay Factor}_n$$

Where:

- *Reduced Electricity Consumption* is the extent to which the electricity consumption of the equipment, process, or system is, as a consequence of the Recognised Energy Saving Activity, different to what it otherwise would have been in year n ;
- *Confidence Factor* depends on the type of engineering assessment performed under clause 7.2 and is assigned according to clause 7.3;
- *Decay Factor_n* is set out in Table A16 of Schedule A for year n ; and
- n is the year from 1 (the first year of Energy Savings claimed) to the number of years in the time period determined by clause 7.4.2.

Note: At the end of the period for which Energy Savings Certificates were ‘forward created’, Accredited Certificate Providers can apply to create Energy Savings Certificates for the Energy Savings which were previously discounted.

7.4.5 For the purposes of section 131 of the Act, Energy Savings which are used to create Energy Savings Certificates in accordance with clause 7.4.6 are taken to occur on the date on which the time period as determined in clause 7.4.2 ends.

7.4.6 At the end of the time period determined by clause 7.4.2, the Accredited Certificate Provider may create Energy Savings Certificates using Energy Savings for the relevant Implementation equal to:

- (a) the Energy Savings for each year in the time period other than the first year as calculated using **Equation 2**; less
- (b) the Energy Savings for each year in the time period other than the first year as calculated for the relevant year in **Equation 3**,

provided the Accredited Certificate Provider establishes, to the satisfaction of the Scheme Administrator, that the Energy Savings calculated in clause 7.4.6(a) have actually occurred.

7.4.7 (deleted)

7.5 The Implementation Date is the date that the Implementation commenced normal operations.

7.6 The Energy Saver is the Purchaser.

7.7 (deleted)

7A Project Impact Assessment with Measurement and Verification Method

7A.1 Equations to calculate Energy Savings

Using the Project Impact Assessment with Measurement and Verification Method, the Energy Savings for an Implementation may be calculated using either:

- (a) **Equations 7A.1 and 7A.2 for forward creation for a single Site model**, for Energy Savings calculated from a Baseline Energy Model and Operating Energy Model established to model performance before and after the Implementation; or

- (b) **Equations 7A.3 and 7A.4 for annual creation or top-up**, for Energy Savings calculated from actual measurements taken after Implementation compared with expected performance of a Baseline Energy Model under the same conditions; or
- (c) **Equations 7A.1 and 7A.5 for creation based on a multiple Site model**, for Energy Savings calculated from a Baseline Energy Model and Operating Energy Model using a Sampling Method where:
 - (i) the Accreditation Date is on or before 15 April 2016, or
 - (ii) the Accreditation Date is on or after 1 October 2016

7A.2 Acceptable energy model types

- (a) Baseline Energy Models and Operating Energy Models must be established in accordance with the following criteria:
 - (i) An Estimate of the Mean that is based on measurements of energy consumption, Independent Variables and Site Constants, where relevant, specifies a Measurement Period, and where the Coefficient of Variation of the energy consumption over the Measurement Period is less than 15%; or
 - (ii) Regression Analysis that is based on measurements of energy consumption, Independent Variables and Site Constants, specifies a Measurement Period, and where the -number of independent observations for the Independent Variables when calculated in accordance with clause 7A.6 is at least six times the Number of Model Parameters in the energy model; or
 - (iii) Computer Simulation that uses a commercially available software package approved by the Scheme Administrator for use in modelling the relevant type of End-User Equipment, and that is calibrated against measurements taken from the actual End-User Equipment being simulated to meet any requirements as Published by the Scheme Administrator; or
 - (iv) a Sampling Method that is based on measurement and Estimate of the Mean, Regression Analysis or Computer Simulation of similar End-User Equipment at similar Sites, and meets any requirements Published by the Scheme Administrator.
- (b) (deleted)

7A.3 Baseline Energy Model

A Baseline Energy Model must estimate either electricity consumption or Gas consumption in the absence of the Implementation and must:

- (a) be dependent on Independent Variables and Site Constants, where relevant, that are established by measurements taken under normal operating conditions in accordance with clause 7A.5 of this Rule;
- (b) if the model is for New End-User Equipment, the Independent Variables and Site Constants may incorporate the market average energy performance of the same type of equipment in accordance with clause 5.3B of this Rule;
- (c) have an Effective Range determined in accordance with clause 7A.8 of this Rule;
- (d) if using **Equation 7A.1**, estimate annual electricity consumption or Gas consumption based on a Normal Year established in accordance with clause 7A.7 of this Rule;
- (e) if using **Equation 7A.3**:
 - (i) estimate annual electricity consumption or Gas consumption based on measurements of Independent Variables and Site Constants; and

- (ii) use a baseline Measurement Period that has an end date that is no more than 10 years earlier than the end date of the Measurement Period that Energy Savings are being claimed for;
- (f) be deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.4 Operating Energy Model

An Operating Energy Model must estimate electricity consumption or Gas consumption after an Implementation during a Normal Year and must:

- (a) be dependent on Independent Variables and Site Constants, where relevant, that are established by measurements taken under normal operating conditions in accordance with clause 7A.5 of this Rule;
- (b) have an Effective Range determined in accordance with clause 7A.8 of this Rule;
- (c) estimate annual electricity consumption or Gas consumption based on a Normal Year established in accordance with clause 7A.7 of this Rule; and
- (d) be deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.5 Measurement Procedures

When measuring electricity consumption, Gas consumption, Independent Variables, Site Constants, or any other relevant parameter, the Accredited Certificate Provider must:

- (a) define the Measurement Period so that it consists of a start date and an end date, and optionally a time of day for each of those dates;
- (b) define the Measurement Period so that it will have:
 - (i) in relation to the Baseline Energy Model under clause 7A.3 of this Rule, an end date that occurs before the Implementation Date;
 - (ii) in relation to the Operating Energy Model under clause 7A.4 of this Rule, a start date that occurs after the Implementation Date; and
 - (iii) in relation to Measured Annual Electricity Savings or Gas Savings under **Equation 7A.3** of this Rule, a start date that occurs after the Implementation Date and an end date that is the day before the anniversary of the start date (such that the Measurement Period is for a full year).
- (c) define the frequency of measurements over the Measurement Period;
- (d) define which items of End-User Equipment will have their electricity consumption, Gas consumption, or both, measured (the measurement boundary);
- (e) specify measurement equipment (meters) or other sources of measurements;
- (f) define the calibration procedures, accuracy and precision of such measurement methods;
- (g) record and exclude any Non-Routine Events that occurred during the Measurement Period, ensuring that the percentage of time excluded is less than 20% of the Measurement Period and
- (h) have the Measurement Procedures defined by clauses 7A.5 (a) to (g) deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.6 Energy consumption, Independent Variables and Site Constants

When identifying and assigning values for electricity consumption, Gas consumption, Independent Variables and Site Constants an Accredited Certificate Provider must:

- (a) define procedures for converting measurements to estimates of the electricity consumption, Gas consumption, Independent Variables and Site Constants, if relevant;
- (b) assign values for electricity consumption, Gas consumption, Independent Variables and Site Constants for each time period in each Measurement Period, where relevant;
- (c) ensure the frequency of independent observations for the Independent Variables and electricity consumption or Gas consumption within the Measurement Period for each energy model are the same; and
- (d) have the electricity consumption, Gas consumption, Independent Variables and Site Constants deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.7 Normal Year

When determining a Normal Year an Accredited Certificate Provider must:

- (a) provide values for each Independent Variable and Site Constant over a full year;
- (b) ensure the Normal Year represents a typical year for operation of the End-User Equipment within the maximum time period for forward creation determined in accordance with clause 7A.12;
- (c) describe the assumptions used to establish the Normal Year; and
- (d) have the Normal Year deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.8 Effective Range

When defining the Effective Range of the energy models in clauses 7A.3 and 7A.4 an Accredited Certificate Provider must:

- (a) ensure that the Effective Range is based on the range of measured values for Independent Variables and Site Constants used to develop the energy model;
- (b) include any Normal Year values for Independent Variables or Site Constants under which the Implementation could reasonably be expected to increase electricity consumption or Gas consumption or both; and
- (c) have the Effective Range deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.9 Interactive Energy Savings

When estimating Interactive Energy Savings an Accredited Certificate Provider, in relation to **Equations 7A.1, 7A.4 or 7A.5**, must:

- (a) estimate the changes to electricity consumption from End-User Equipment for which electricity consumption will not be measured (Interactive Electricity Savings);
- (b) estimate the changes to Gas consumption from End-User Equipment for which Gas consumption will not be measured (Interactive Gas Savings);

- (c) ensure that Interactive Electricity Savings and Interactive Gas Savings are not greater than 10% of total Electricity Savings and Gas Savings respectively, unless estimated in accordance with a Guide; and
- (d) have the Interactive Energy Savings deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.10 Accuracy Factor

The Accuracy Factor, in relation to **Equations 7A.1** and **7A.3**, is between 1 and 0; and

- (a) is either;
 - (i) the value corresponding to the energy model type and relative precision of the Electricity Savings or Gas Savings estimate at 90% confidence level as listed in Table A23; or
 - (ii) determined by another process as Published by the Scheme Administrator; and
- (b) must be deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.11 Energy Savings brought forward

- (a) For the purposes of section 131 of the Act, the future Energy Savings for an Implementation calculated using **Equation 7A.1**, based on Normal Year Electricity Savings or Gas Savings calculated using **Equation 7A.2**, are taken to occur on the last date of the Measurement Period for the Operating Energy Model as defined in clause 7A.4 of this Rule.
- (b) For the purposes of section 131 of the Act, the future Energy Savings for an Implementation calculated using **Equation 7A.1**, based on Normal Year Electricity Savings or Gas Savings calculated using **Equation 7A.5**, are taken to occur on the later of:
 - (i) the last date of the Measurement Period for the Operating Energy Model; and
 - (ii) the Implementation Date.
- (c) A maximum of 50,000 Energy Savings Certificates can be brought forward from each Implementation.

7A.12 Maximum Time Period for Forward Creation

The maximum time period for forward creation of Energy Savings Certificates in respect of future Energy Savings for an Implementation calculated using **Equation 7A.1**, and for the purposes of clauses 7A.7 and 7A.13, must be set such that:

- (a) the period does not exceed the expected lifetime of the End-User Equipment in whole years, as determined by a Persistence Model;
- (b) if Energy Savings Certificates have previously been created for the Implementation using the Project Impact Assessment Method, the period does not exceed 5 years; and
- (c) the end date of the period is not later than 10 years after the Implementation Date.

7A.13 Persistence Model

- (a) A Persistence Model must not be used in connection with the calculation of Energy Savings unless it has first been determined to be acceptable for use by the Scheme Administrator.
- (b) A Persistence Model must:
 - (i) estimate the expected lifetime of the End-User Equipment in whole years;

- (ii) estimate the Decay Factor for each future year within the Maximum Time Period for Forward Creation;
 - (iii) be publicly accessible; and
 - (iv) satisfy any requirements Published by the Scheme Administrator.
- (c) The use of a Persistence Model to forecast the Energy Savings from an Implementation must take into account:
- (i) the Business Classification from Table A18 of the Site, if known and relevant;
 - (ii) the End-User Equipment type;
 - (iii) the operating hours for the End-User Equipment; and
 - (iv) typical ambient conditions for the Site, including, where relevant, temperature, humidity and salinity.
- (d) The Accredited Certificate Provider must have the use of the Persistence Model deemed appropriate for the Implementation by a Measurement and Verification Professional, with their written explanatory reasoning provided.

7A.14 Top-up certificate creation

- (a) Accredited Certificate Providers may create new Energy Savings Certificates in respect of Additional Energy Savings calculated using **Equation 7A.3** and **7A.4**, provided that:
- (i) the calculation is based on a full year of measurements;
 - (ii) the start date of the Measurement Period must fall on an anniversary of the Implementation Date; and
 - (iii) the end date of the Measurement Period is within the maximum time period for forward creation determined under clause 7A.12.
- (b) For the purposes of section 131 of the Act, the Energy Savings for which Energy Savings Certificates are created under this clause are taken to occur on the end date of the Measurement Period of the Energy Savings.

7A.15 Measurement and Verification Professional

- (a) A Measurement and Verification Professional is a person who is approved by the Scheme Administrator on the basis that such person satisfies the following criteria:
- (i) the person has an understanding of best practice measurement & verification techniques;
 - (ii) the person has an understanding of how the relevant End-User Equipment converts energy into End-Use Services and is affected by the Independent Variables;
 - (iii) the person is able to perform Regression Analysis, if relevant;
 - (iv) the person is able to calibrate outputs from a computer simulation, if relevant; and
 - (v) the person satisfies such additional requirements as are Published from time to time by the Scheme Administrator.
- (b) The Scheme Administrator may withdraw its approval of a person as a Measurement and Verification Professional if the Scheme Administrator considers that the person does not, or ceases to, satisfy the criteria set out in clause 7A.15(a).

7A.16 Guides

The Scheme Administrator may Publish Guides that detail acceptable and unacceptable approaches for Accredited Certificate Providers and Measurement and Verification Professionals to meet the requirements of clause 7A of this Rule.

7A.17 Implementation Date

The Implementation Date is the date that the Implementation commenced normal operations.

7A.18 Energy Saver

The Energy Saver is the Purchaser.

7A.19 (deleted)

Note: Equations 7A.1 to 7A.5 are used as required to:

- calculate Electricity Savings for projects that affect electricity consumption;
- calculate Gas Savings for projects that affect Gas consumption; or
- calculate Electricity Savings and Gas Savings separately for projects that affect both electricity consumption and Gas consumption.

Equation 7A.1**Energy Savings calculated from a Baseline Energy Model and Operating Energy Model**

$$\text{Electricity Savings} = \sum_i \left((\text{Normal Year Electricity Savings} \times \text{Accuracy Factor} \times \text{Decay Factor}_i - \text{Counted Energy Savings}_i) \times \text{Regional Network Factor} \right)$$

$$\text{Gas Savings} = \sum_i \left(\text{Normal Year Gas Savings} \times \text{Accuracy Factor} \times \text{Decay Factor}_i - \text{Counted Energy Savings}_i \right)$$

Where:

- the summation is over each year i over the *Maximum Time Period for Forward Creation* of the Electricity Savings or Gas Savings.
- *Normal Year Electricity Savings or Gas Savings*, in MWh, is the estimated electricity savings, if calculating *Electricity Savings*, or estimated Gas savings, if calculating *Gas Savings*, attributable to the Implementation from a Normal Year of operation before taking into account equipment degradation, and is calculated using:
 - **Equation 7A.5** if a Sampling Method is used, and
 - **Equation 7A.2** in all other cases.
- *Accuracy Factor*, is a number between 0 and 1, as determined by clause 7A.10 of this Rule.
- *Decay Factor_i*, is a number between 0 and 1, which quantifies the decay of the Electricity Savings or Gas Savings in year i due to equipment degradation over time, and is:
 - equal to 1 for Electricity Savings in any years the Normal Year Electricity Savings are negative; and
 - equal to 1 for Gas Savings in any years the Normal Year Gas Savings are negative; and
 - in all other cases, determined by either:

- applying the value corresponding to the relevant year since the Implementation Date in Table A16, or
- assigning a value for that year from a Persistence Model in accordance with clause 7A.13 of this Rule.
- *Maximum Time Period for Forward Creation* is determined in accordance with clause 7A.12 of this Rule; and
- *Counted Energy Savings_i* is the:
 - total Electricity Savings for which Energy Savings Certificates have previously been created for the Implementation in the year *i* if calculating Electricity Savings; or
 - total Gas Savings for which Energy Savings Certificates have previously been created for the Implementation in the year *i* if calculating Gas Savings.
- *Regional Network Factor* is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites where the Implementation took place.

Equation 7A.2**Calculation of Normal Year Electricity Savings or Gas Savings**

$$\text{Normal Year Electricity Savings or Gas Savings} = \sum_t (E_{\text{Baseline}}(\tilde{x}_1(t), \tilde{x}_2(t), \dots, \tilde{x}_p(t)) - E_{\text{Operating}}(\tilde{x}_1(t), \tilde{x}_2(t), \dots, \tilde{x}_p(t))) + \text{Interactive Energy Savings}$$

where:

- the summation is over all time periods *t* in the Normal Year, excluding any time periods for which any of $\tilde{x}_1(t), \tilde{x}_2(t), \dots, \tilde{x}_p(t)$ is less than 95% of the minimum or greater than 105% of the maximum of the Effective Range of that Independent Variable for either the Baseline Energy Model or Operating Energy Model; or where the Site Constants are not their standard value;
- $\tilde{x}_p(t)$ is the value of each of the Independent Variables x_p for time period *t* over the Normal Year determined in accordance with clause 7A.7 of this Rule;
- E_{Baseline} is:
 - the electricity consumption predicted by a Baseline Energy Model established in accordance with clauses 7A.2 and 7A.3 using measurements of electricity consumption; or
 - the Gas consumption predicted by a Baseline Energy Model established in accordance with clauses 7A.2 and 7A.3 using measurements of Gas consumption;
- $E_{\text{Operating}}$ is:
 - the electricity consumption predicted by an Operating Energy Model established in accordance with clauses 7A.2 and 7A.4 using measurements of electricity consumption; or
 - the Gas consumption predicted by an Operating Energy Model established in accordance with clauses 7A.2 and 7A.4 using measurements of Gas consumption; and
- *Interactive Energy Savings* is estimated in accordance with clause 7A.9 of this Rule and is either the:
 - Interactive Electricity Savings if calculating Electricity Savings; or
 - Interactive Gas Savings if calculating Gas Savings.

Equation 7A.3**Energy Savings calculated from measurements and Baseline Energy Model**

Electricity Savings = (*Measured Annual Electricity Savings* × *Accuracy Factor* - *Counted Energy Savings_i*) × *Regional Network Factor*

Gas Savings = *Measured Annual Gas Savings* × *Accuracy Factor* - *Counted Energy Savings_i*

Where:

- *Measured Annual Electricity Savings* or *Gas Savings*, in MWh, is the Electricity Savings or Gas Savings attributable to the Implementation from the actual measured conditions over a full year *i*, and is calculated in **Equation 7A.4**;
- *Accuracy Factor* is the number determined by clause 7A.10 of this Rule; and
- *Counted Energy Savings_i* is the:
 - total Electricity Savings for which Energy Savings Certificates have previously been created for the Implementation in the year *i* if calculating Electricity Savings; or
 - total Gas Savings for which Energy Savings Certificates have previously been created for the Implementation in the year *i* if calculating Gas Savings.
- *Regional Network Factor* is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites where the Implementation took place.

Equation 7A.4**Calculation of Measured Annual Electricity Savings or Gas Savings**

Measured Annual Electricity Savings or Gas Savings = $\sum_t (E_{Baseline}(x_1(t), x_2(t), \dots, x_p(t)) - E_{Measured}(t)) +$
Interactive Energy Savings

where:

- The summation is over all measurement time periods *t* in the year, excluding any time periods *t* for which any of the measured Independent Variable values $x_1(t), x_2(t), \dots, x_p(t)$ is less than 95% of the minimum or greater than 105% of the maximum of the Effective Range of that Independent Variable for the Baseline Energy Model, or where the Site Constants are not their standard value;
- $x_j(t)$ is the value of the Independent Variable x_j measured during time period *t* determined in accordance with clause 7A.5;
- $E_{Measured}$ is:
 - the electricity consumption measured during the time period *t* in accordance with clause 7A.5 if calculating Electricity Savings; or
 - the Gas consumption measured during the time period *t* in accordance with clause 7A.5 if calculating Gas Savings.
- $E_{Baseline}$ is:
 - the electricity consumption predicted by a Baseline Energy Model established in accordance with clauses 7A.2 and 7A.3 using measurements of electricity consumption; or
 - the Gas consumption predicted by a Baseline Energy Model established in accordance with clauses 7A.2 and 7A.3 using measurements of Gas consumption; and

- *Interactive Energy Savings* is estimated in accordance with clause 7A.9 of this Rule and is either the:
 - Interactive Electricity Savings if calculating Electricity Savings; or
 - Interactive Gas Savings if calculating Gas Savings.

Equation 7A.5**Calculation of Normal Year Electricity Savings or Gas Savings using a Sampling Method**

$$\text{Normal Year Electricity Savings or Gas Savings} = \sum_t \left(E_{\text{Baseline}}(\tilde{x}_1(t), \tilde{x}_2(t), \dots, \tilde{x}_p(t), y_1, y_2, \dots, y_q) - E_{\text{Operating}}(\tilde{x}_1(t), \tilde{x}_2(t), \dots, \tilde{x}_p(t), y_1, y_2, \dots, y_q) \right) + \text{Interactive Energy Savings}$$

where:

- the summation is over all time periods t in the Normal Year, excluding any time periods for which any of $\tilde{x}_1(t), \tilde{x}_2(t), \dots, \tilde{x}_p(t)$ is less than 95% of the minimum or greater than 105% of the maximum of the Effective Range of that Independent Variable for either the Baseline Energy Model or Operating Energy Model, or where the Site Constants are not their standard value;
- $\tilde{x}_j(t)$ is the value of the Independent Variable x_j for time period t in the Normal Year for the Site determined in accordance with clause 7A.7 of this Rule;
- y_k is the value of the Site Constant k for the Site measured in accordance with clause 7A.6;
- E_{Baseline} is:
 - the electricity consumption predicted by a Baseline Energy Model established in accordance with clauses 7A.2 and 7A.3 using measurements of electricity consumption; or
 - the Gas consumption predicted by a Baseline Energy Model established in accordance with clauses 7A.2 and 7A.3 using measurements of Gas consumption.
- $E_{\text{Operating}}$ is:
 - the electricity consumption predicted by an Operating Energy Model established in accordance with clauses 7A.2 and 7A.4 using measurements of electricity consumption; or
 - the Gas consumption predicted by an Operating Energy Model established in accordance with clauses 7A.2 and 7A.4 using measurements of Gas consumption; and
- *Interactive Energy Savings* is estimated in accordance with clause 7A.9 of this Rule and is either the:
 - Interactive Electricity Savings if calculating Electricity Savings; or
 - Interactive Gas Savings if calculating Gas Savings.

8 Metered Baseline Method

Note: The Metered Baseline Method uses measurements of energy consumption “before” the Implementation has been undertaken to establish a “baseline” energy consumption standard for the Site being considered. The same measurements performed “after” the Implementation has been undertaken will establish new levels of energy consumption, with the difference representing the impact of the Implementation.

Energy Savings are adjusted by a confidence factor that is calculated based on the size of the Energy Savings relative to the unexplained variance in the baseline.

- 8.1 The Metered Baseline Method in this clause 8 may only be used to calculate Energy Savings if measurements made are of a standard, duration, and to a level of accuracy, satisfactory to the Scheme Administrator.
- 8.2 Using the Metered Baseline Method, the Energy Savings are calculated under:
- (a) clause 8.5, using the Baseline per unit of output sub-method;
 - (b) clause 8.6, using the Baseline unaffected by output sub-method;
 - (c) clause 8.7, using the Normalised baseline sub-method;
 - (d) clause 8.8, using the NABERS baseline sub-method; or
 - (e) clause 8.9, using the Aggregated Metered Baseline sub-method,
- provided that all Energy Savings can (to the satisfaction of the Scheme Administrator) be attributed to the corresponding Recognised Energy Saving Activity.
- 8.3 The time period over which any baseline is determined under this clause 8, using energy measurements before the Implementation Date of the Implementation, must include one or more time periods preceding the Implementation Date. The time period(s) used to determine the baseline must be acceptable to the Scheme Administrator.
- 8.3A For the purposes of clauses 8.5, 8.6 and 8.7, where the Accreditation Date, with respect to the Recognised Energy Saving Activity, is:
- (a) on or after 15 April 2016, Energy Savings may only be calculated for up to a maximum of 10 years from the end date of the baseline measurement period;
 - (b) before 15 April 2016 and the end date of the baseline measurement period is less than or equal to 10 years before 15 April 2016, Energy Savings may only be calculated for a maximum of 10 years from the end date of the baseline measurement period; and
 - (c) before 15 April 2016 and the end date of the baseline measurement period is more than 10 years before 15 April 2016, Energy Savings may only be calculated for a period that is, as a maximum, equal to the length of the period from the end date of the baseline measurement period to 15 April 2016.
- 8.4 The Accredited Certificate Provider must use utility meters or other metering equipment acceptable to the Scheme Administrator.

Note: Sub-metering may be used to effectively reduce the size of the Site considered for baseline calculations, thereby increasing the accuracy of the baseline and hence the Confidence Factor.

8.5 Baseline per unit of output

Note: This Metered Baseline Method is most appropriate where energy consumption is strongly linked to output (for example, in aluminium smelting).

Where the relationship is non-linear, or there are multiple products or changes in raw materials affecting consumption, another method of normalising the baseline should be used.

- 8.5.1 The Energy Savings for an Implementation may be calculated using **Method 1**, provided that:
- (a) the energy consumption for the Site is a linear function of output;

- (b) fixed energy consumption, which is the energy consumption of the Site that does not vary with variations in output, can be measured or estimated;
- (c) output has not changed from the average output over the period during which the variable energy baseline is measured by more than 50%; and
- (d) the variable energy baseline is calculated using data from periods immediately preceding the Implementation Date, up to a maximum of 5 years, excluding any periods that are not representative of the long term Site consumption due to factors including plant shutdown or major maintenance. Where this is not possible, due to data unavailability or other reasons, a baseline may be set using other periods acceptable to the Scheme Administrator.
- (e) Electricity Savings and Gas Savings are calculated for Implementations that increase either electricity consumption or Gas consumption.

- 8.5.2 The Implementation Date is the earlier of the start date of the first Measurement Period that occurs after the end of the last period T_b referred to in Method 1 or the date on which the reduction of energy consumption commenced due to the Implementation.
- 8.5.3 The Energy Saver is the person who is liable (contractually or otherwise) to pay for the energy consumption at the Site at the Implementation Date.
- 8.5.4 For the purposes of section 131 of the Act, Energy Savings calculated under this clause 8.5 are taken to have occurred on the last date of the Measurement Period.

Method 1 – Baseline per unit of output

Step (1) Select a *Measurement Period* acceptable to the Scheme Administrator, that will be the duration of time over which all measurements in this method will be taken and that is:

- (a) a minimum of one day and a maximum of one year; and
- (b) if there is a regular cycle to the consumption of energy on the Site, an integer multiple of the period of that cycle.

Step (2) Determine *Electricity Savings*, or *Gas Savings*, or both, by completing Steps (2A) to (2G) for each energy source, and for each time period T_a by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates by repeating Steps (2E) to (3) for each energy source for each such period.

Step (2A) Determine the *Fixed Consumption* (in MWh), which is the consumption of electricity or Gas for the Site that does not vary with variations in output, and is:

- determined by estimating or extrapolating from measurements taken during plant downtime or estimated or determined mathematically from multiple periods;
- a reasonable reflection of the consumption unaffected by output, and will lead to Energy Savings calculations that are reasonable, and
- over a period T_b before Energy Savings commence and the duration of which is equal to the Measurement Period.

Step (2B) Calculate *Variable Consumption* _{T_b} (in MWh / unit of output) for n time periods T_b as follows:

$$\text{Variable Consumption}_{T_b} = (\text{Total Consumption}_{T_b} - \text{Fixed Consumption}) / \text{Output}_{T_b}$$

Where:

- T_b denotes a time period, before the Implementation Date, the duration of which is equal to the Measurement Period, and where each time period is mutually exclusive with each other such time period;
- *Total Consumption* _{T_b} (in MWh) is the consumption of electricity or Gas for the Site measured by metering that consumption over each time period T_b ;

- $Output_{T_b}$ is the number of units of output during each time period T_b ; and
- n is the number of time periods, T_b , where n must be at least 1.

Step (2C) Calculate *Variable Baseline* (in MWh / unit of output):

$$\text{Variable Baseline} = \left\{ \sum_{T=1}^n \text{Variable Consumption}_{T_b} \right\} / n$$

Step (2D) Calculate *Baseline Variability* (in MWh / unit of output), which is the unexplained variance in the baseline, as follows:

If $n > 2$:

$$\text{Baseline Variability} = (\text{maximum Variable Consumption}_{T_b} - \text{minimum Variable Consumption}_{T_b}) / 2$$

Where:

- *maximum Variable Consumption_{T_b}* is the maximum value of *Variable Consumption_{T_b}* over n time periods T_b ; and
- *minimum Variable Consumption_{T_b}* is the least value of *Variable Consumption_{T_b}* over n time periods T_b .

If $n \leq 2$:

$$\text{Baseline Variability} = 10\% \text{ of Variable Baseline}$$

Step (2E) Calculate *Reduced Consumption* (in MWh) for the time period T_a (after the Implementation Date) for which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

$$\text{Reduced Consumption} = (\text{Output}_{T_a} \times \text{Variable Baseline} + \text{Fixed Consumption}) - \text{Total Consumption}_{T_a}$$

Where:

- T_a denotes a time period, after the Implementation Date, the duration of which is equal to the *Measurement Period*;
- *Total Consumption_{T_a}* (in MWh) is the consumption of electricity or Gas for the Site measured by metering that consumption over a time period T_a ; and
- $Output_{T_a}$ is the number of units of output during the time period T_a .

Step (2F) Calculate the *Confidence Factor* as follows:

$$\text{Confidence Factor} = 1 - (\text{Baseline Variability} / \text{Variable Baseline})$$

Step (2G) If measuring electricity consumption, calculate *Electricity Savings* (in MWh) for each time period T_a by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

$$\text{Electricity Savings} = \text{Reduced Consumption} \times \text{Confidence Factor} \times \text{Regional Network Factor}$$

Where:

- *Regional Network Factor* is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites where the Implementation took place.

If measuring Gas consumption, calculate *Gas Savings* (in MWh) for each time period T_a by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

$$\text{Gas Savings} = \text{Reduced Consumption} \times \text{Confidence Factor}$$

Step (3) Ensure net *Energy Savings* are non-negative.

If $\text{Electricity Savings} \times \text{Electricity Certificate Conversion Factor} + \text{Gas Savings} \times \text{Gas Certificate Conversion Factor} < 0$, then $\text{Electricity Savings} = 0$ and $\text{Gas Savings} = 0$

8.6 Baseline unaffected by output

Note: This Metered Baseline Method is most appropriate where consumption is not linked to output of the End-User Equipment subject to the energy savings activity. To use this method the output of the End-User Equipment should not be affected by temperature or other standard normalisation variables.

- 8.6.1 The Energy Savings for an Implementation may be calculated using **Method 2**, provided that:
- (a) the consumption of all energy sources for the Site is independent of output; and
 - (b) the *Baseline* is calculated using data from periods immediately preceding the Implementation Date, to a maximum duration of 5 years, and excluding any periods that are not representative of long term Site consumption due to factors including plant shutdown or major maintenance. Where this is not possible, due to data unavailability or other reasons, a baseline may be set using other periods acceptable to the Scheme Administrator.
 - (c) Electricity Savings and Gas Savings are calculated for Implementations that increase either electricity consumption or Gas consumption.
- 8.6.2 The Implementation Date is the earlier of the start date of the first Measurement Period that occurs after the end of the last period T_b referred to in Method 2 or the date on which the reduction of energy consumption commenced due to the Implementation.
- 8.6.3 The Energy Saver is the person who is liable (contractually or otherwise) to pay for the energy consumption at the Site at the Implementation Date.
- 8.6.4 For the purposes of section 131 of the Act, Energy Savings calculated under this clause 8.6 are taken to have occurred on the last date of the Measurement Period.

Method 2 – Baseline unaffected by output

Step (1) Select a *Measurement Period* acceptable to the Scheme Administrator, that will be the duration of time over which all measurements in this method will be taken and that is:

- (a) a minimum of one day and a maximum of one year; and
- (b) if there is a regular cycle to the consumption of electricity or Gas on the Site, an integer multiple of the period of the respective cycle.

Step (2) Determine *Electricity Savings*, or *Gas Savings*, or both, by completing Steps (2A) to (2E) for each energy source, and for each time period T_a by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates by repeating Steps (2C) to (3) for each energy source for each such period.

Step (2A) Calculate *Baseline* (in MWh) as follows:

$$Baseline = \left\{ \sum_{T=1}^n Total\ Consumption_{T_b} \right\} / n$$

Where:

- T_b denotes a time period, before the Implementation Date, the duration of which is equal to the Measurement Period, and where each time period is mutually exclusive with each other such time period
- $Total\ Consumption_{T_b}$ (in MWh) is the consumption of electricity or Gas for the Site measured by metering that consumption over each time period T_b ; and
- n is the number of time periods, T_b , where n must be at least 1.

Step (2B) Calculate *Baseline Variability* (in MWh), which is the variance in the baseline, as follows:

If $n > 1$:

$$\text{Baseline Variability} = (\text{maximum Total Consumption}_{T_b} - \text{minimum Total Consumption}_{T_b}) / 2$$

Where:

- *maximum Total Consumption_{T_b}* is the maximum value of *Total Consumption_{T_b}* over n time periods T_b ; and
- *minimum Total Consumption_{T_b}* is the least value of *Total Consumption_{T_b}* over n time periods T_b

If $n = 1$:

$$\text{Baseline Variability} = 10\% \text{ of Baseline}$$

Step (2C) Calculate *Reduced Consumption* (in MWh) for the time period T_a (after the Implementation Date) for which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

$$\text{Reduced Consumption} = \text{Baseline} - \text{Total Consumption}_{T_a}$$

Where:

- T_a denotes a time period, after the Implementation Date, the duration of which is equal to the Measurement Period; and
- *Total Consumption_{T_a}* (in MWh) is the consumption of electricity or Gas for the Site measured by metering that consumption over a time period T_a

Step (2D) Calculate *Confidence Factor* as follows:

$$\text{Confidence Factor} = 1 - (\text{Baseline Variability} / \text{Baseline})$$

Step (2E) If measuring electricity consumption, calculate *Electricity Savings* (in MWh) for the time period T_a for which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

- $\text{Electricity Savings} = \text{Reduced Consumption} \times \text{Confidence Factor} \times \text{Regional Network Factor}$

Where:

- *Regional Network Factor* is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites where the Implementation took place.

If measuring Gas consumption, calculate *Gas Savings* (in MWh) for each time period T_a by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

$$\text{Gas Savings} = \text{Reduced Consumption} \times \text{Confidence Factor}$$

Step (3) Ensure net *Energy Savings* are non-negative.

If $\text{Electricity Savings} \times \text{Electricity Certificate Conversion Factor} + \text{Gas Savings} \times \text{Gas Certificate Conversion Factor} < 0$, then $\text{Electricity Savings} = 0$ and $\text{Gas Savings} = 0$

8.7 Normalised baseline

Note: This Metered Baseline Method normalises energy consumption for a Site to remove explainable variation from the baseline, for example, adjusting for variations in ambient conditions or variations in input characteristics. The factors chosen for the normalisation must cause the variability (that is the subject of removal) and not be the result of spurious correlations.

Option C of the IPMVP can be used for guidance as to the normalisation of baselines, particularly for complex

cases.

- 8.7.1 The Energy Savings for an Implementation may be calculated using **Method 3**, provided that:
- the *Normalisation Variables* in respect of which the *Total Consumption* is normalised are variables corresponding to the specific activities that are a reason for change in *Total Consumption*; and
 - the *Normalised Baseline* is calculated using data from periods immediately preceding the Implementation Date, to a maximum duration of 5 years, and excluding any periods that are not representative of long term Site consumption due to circumstances such as plant shutdown or major maintenance. Where this is not possible, due to data unavailability or other reasons, a baseline may be set using other periods acceptable to the Scheme Administrator.
 - Electricity Savings and Gas Savings are calculated for Implementations that increase either electricity consumption or Gas consumption.
- 8.7.2 The Implementation Date is the earlier of the start date of the first Measurement Period that occurs after the end of the last period T_b referred to in Method 3 or the date on which the reduction of energy consumption commenced due to the Implementation.
- 8.7.3 The Energy Saver is the person who is liable (contractually or otherwise) to pay for the energy consumption at the Site at the Implementation Date.
- 8.7.4 For the purposes of section 131 of the Act, Energy Savings calculated under this clause 8.7 are taken to have occurred on the last date of the Measurement Period.

Method 3 – Normalised baseline

Step (1) Select a *Measurement Period* acceptable to the Scheme Administrator, that will be the duration of time over which all measurements in this method will be taken and that is:

- a minimum of one day and a maximum of one year; and
- if there is a regular cycle to the consumption of energy on the Site, an integer multiple of the period of that cycle.

Step (2) Determine Savings, or *Gas Savings*, or both, by completing Steps (2A) to (2F) for each energy source and for the time period T_a for which the Accredited Certificate Provider seeks to create Energy Savings Certificates, by repeating Steps (2D) to (3) for each energy source for each such period.

Step (2A) Calculate *Normalised Consumption_{T_b}*

 (in MWh) for n time periods T_b by normalising the *Total Consumption_{T_b}* to determine the consumption that would have occurred for period T_b had the conditions at time T_a existed, using:

- a set of normalisation coefficients, which are one or more coefficients calculated to account for the variation in *Total Consumption_{T_b}* per unit of change for each corresponding normalisation variable used in Step(2A)(b); and
- a set of values, which are the difference between the values of the normalisation variables for each time period T_b , and the values of the normalisation variables for one time period T_a , determined by measurements or other data sources.

Where:

- T_b denotes a time period, before the Implementation Date, the duration of which is equal to the Measurement Period, and where each time period is mutually exclusive with each other such time period
- T_a denotes a time period, after the Implementation Date, the duration of which is equal to the Measurement Period

- *Total Consumption_{Tb}* (in MWh) is the consumption of electricity or Gas for the Site measured by metering that consumption over each time period *T_b*
- *n* is the number of time periods, *T_b*, where *n* must be at least 1; and
- *Normalisation Variables* are the variables in respect of which the *Total Consumption_{Tb}* is normalised and must correspond to factors that are a reason for change in *Total Consumption_{Tb}*

Step (2B) Calculate *Normalised Baseline* (in MWh) as follows:

$$\text{Normalised Baseline} = \left\{ \sum_{T=1}^n \text{Normalised Consumption}_{Tb} \right\} / n$$

Step (2C) Calculate *Baseline Variability* (in MWh), which is the unexplained variance in the baseline, as follows:

If $n > 1$:

$$\text{Baseline Variability} = (\text{maximum Normalised Consumption}_{Tb} - \text{minimum Normalised Consumption}_{Tb}) / 2$$

Where:

- *maximum Normalised Consumption_{Tb}* is the maximum value of *Normalised Consumption_{Tb}* over *n* time periods *Tb*; and
- *minimum Normalised Consumption_{Tb}* is the least value of *Normalised Consumption_{Tb}* over *n* time periods *Tb*

If $n = 1$:

$$\text{Baseline Variability} = 10\% \text{ of Normalised Baseline}$$

Step (2D) Calculate *Reduced Consumption* (in MWh) for the time period *T_a* (after the Implementation Date) for which the Accredited Certificate Provider seeks to create Energy Savings Certificates, as follows:

$$\text{Reduced Consumption} = \text{Normalised Baseline} - \text{Total Consumption}_{Ta}$$

Where:

- *T_a* denotes a time period, after the Implementation Date, the duration of which is equal to the Measurement Period; and
- *Total Consumption_{Ta}* (in MWh) is the consumption of electricity or Gas for the Site measured by metering that consumption over a time period *T_a*

Step (2E) Calculate *Confidence Factor*:

$$\text{Confidence Factor} = 1 - (\text{Baseline Variability} / \text{Normalised Baseline})$$

Step (2F) If measuring electricity consumption, calculate *Electricity Savings* (in MWh) for each time period *T_a* by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates:

$$\text{Electricity Savings} = \text{Reduced Consumption} \times \text{Confidence Factor} \times \text{Regional Network Factor}$$

Where:

- *Regional Network Factor* is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites where the Implementation took place.

If measuring Gas consumption, calculate *Gas Savings* (in MWh) for each time period *T_a* by reference to which the Accredited Certificate Provider seeks to create Energy Savings Certificates as follows:

$$\text{Gas Savings} = \text{Reduced Consumption} \times \text{Confidence Factor}$$

Step (3) Ensure net *Energy Savings* are non-negative:

If $\text{Electricity Savings} \times \text{Electricity Certificate Conversion Factor} + \text{Gas Savings} \times \text{Gas Certificate Conversion Factor} < 0$, then $\text{Electricity Savings} = 0$ and $\text{Gas Savings} = 0$

8.8 NABERS baseline

- 8.8.1 The Energy Savings for an Implementation may be calculated using **Method 4** for a NABERS Building, provided that:
- (a) the NABERS Rating is calculated using one of the following NABERS tools:
 - (i) NABERS for Offices;
 - (ii) NABERS for Hotels;
 - (iii) NABERS for Shopping Centres; or
 - (iv) NABERS for Data Centres.
 - (b) the NABERS Rating excludes any GreenPower in accordance with clause 5.4(d);
 - (c) the NABERS Rating meets the eligibility criteria applied in clause 8.8.3;
 - (d) all sources of on-site electricity generation have been identified; and
 - (e) all electricity generated from sources of On-site Unaccounted Electricity (as referred to in Method 4) has been metered and recorded over the NABERS Rating Period.
- 8.8.2 For the purposes of this clause 8.8:
- (a) the NABERS Rating is a current NABERS rating that will be used to calculate Energy Savings;
 - (b) the Historical Baseline NABERS Rating is a previous NABERS Rating for the same NABERS Building and is used for Calculation Method 2 at Step 2 of Method 4;
 - (c) the Rating Period is the time over which measurements were taken to establish the NABERS Rating or the Historical Baseline NABERS Rating for the NABERS Building;
 - (d) the Current Rating Year is the year for which Energy Savings Certificates will be created, and is the year that the Rating Period ended for the NABERS Rating; and
 - (e) the Baseline Rating Year is the year that the Rating Period ended for the Historical Baseline NABERS Rating.
- 8.8.3 The NABERS Rating must:
- (a) if using Calculation Method 1:
 - (i) for the first Rating Period for which Energy Savings will be calculated, exceed the Benchmark NABERS Rating from Table A20 by at least 0.5 stars; and
 - (ii) for subsequent Rating Periods for which Energy Savings will be calculated, exceed the Benchmark NABERS Rating from Table A20 used for the first Rating Period by at least 0.5 stars.
 - (b) exceed the Historical Baseline NABERS Rating by at least 1 star if using Calculation Method 2.
- 8.8.4 When calculating a Benchmark NABERS Rating using Calculation Method 2 at step 2 of Method 4:
- (a) the Benchmark NABERS Rating can only be calculated using a fixed Historical Baseline NABERS Rating which was calculated no more than 7 years before the end date of the Current Rating Year; or
 - (b) if this calculation method is to be used for Additional Energy Savings and the fixed Historical Baseline NABERS Rating does not meet the requirements of clause 8.8.4(a), it must be reset using a previous NABERS Rating that is at least 7 years later than the end date of the Baseline Rating Period for the previous fixed Historical Baseline NABERS Rating;

- (c) The historical baseline NABERS rating must be based on a similar configuration (for example, metering arrangements and on-site energy generation), as determined by the Scheme Administrator
- 8.8.5 The Implementation Date is the end date of the first Rating Period for which Energy Savings will be calculated under clause 8.8.7.
- 8.8.6 The Energy Saver is the person whose name is identified on the NABERS Rating certificate, as issued by the NABERS National Administrator, in respect of the NABERS Rating.
- 8.8.7 For the purposes of section 131 of the Act, Energy Savings are taken to occur on the date that the Scheme Administrator determines that the relevant NABERS Rating was completed.
- 8.8.8 Energy Savings Certificates cannot be created for a NABERS Rating more than twelve months after the end of the Measurement Period applicable to that NABERS Rating.
- 8.8.9 The requirements of clauses 6.8(h) and 6.8(i) do not apply in relation to Energy Savings Certificates for Energy Savings calculated in accordance with clause 8.8.

Method 4 – NABERS Benchmark

Step 1 – Calculate Measured Electricity Consumption and Measured Gas Consumption

Using the measurements taken to establish the NABERS Rating, and other measurements taken as necessary, calculate total energy consumption for the NABERS Building as follows:

$$\text{Measured Electricity Consumption (MWh)} = \text{NABERS Electricity} + \text{On-site Unaccounted Electricity}$$

$$\text{Measured Gas Consumption (MWh)} = \text{NABERS Gas}$$

Where:

- *NABERS Electricity*, in MWh, is the electricity purchased or imported from the Electricity Network and accounted for in the NABERS Rating, including electricity purchased as GreenPower; and
- *On-site Unaccounted Electricity*, in MWh, is electricity generated on-site from energy sources which have not been accounted for in the NABERS Rating, including electricity generated from photovoltaic cells or gas generators fed from on-site biogas sources, but excluding gas generators where the imported gas has been accounted for in the NABERS Rating; and
- *NABERS Gas*, in MWh, is the total of the Gas accounted for in the NABERS Rating.

Step 2 – Calculate Benchmark NABERS Rating

Calculate the Benchmark NABERS Rating, by using either:

- (a) Calculation Method 1: Look up the Benchmark NABERS Rating in Table A20 of Schedule A which corresponds to the relevant Current Rating Year, NABERS Rating tool and building category; or
- (b) Calculation Method 2: Calculate the Benchmark NABERS Rating based on a Historical Baseline NABERS Rating as follows:

$$\text{Benchmark NABERS Rating} = \text{Historical Baseline NABERS Rating} + \text{Annual Rating Adjustment} \times (\text{Current Rating Year} - \text{Baseline Rating Year})$$

Where:

- *Historical Baseline NABERS Rating* is as defined in clause 8.8.2 and meets the requirements set out in clause 8.8.4

- *Annual Rating Adjustment* is the amount by which average NABERS Ratings increase each year and is the value in **Table A21** which corresponds to the relevant NABERS Rating tool and building category; and
- *Baseline Rating Year* is as defined in clause 8.8.2(e)

Step 3 – Calculate Benchmark Electricity Consumption and Benchmark Gas Consumption

Benchmark Electricity Consumption is the electricity consumption that would be required for that same NABERS Building to achieve the *Benchmark NABERS Rating* over the NABERS Rating Period, assuming the same breakdown of energy consumption. It is the electricity component of maximum allowable energy consumption, converted to MWh.

Benchmark Gas Consumption is the Gas consumption that would be required for that same NABERS Building to achieve the *Benchmark NABERS Rating* over the NABERS Rating Period, assuming the same breakdown of energy consumption. It is the Gas component of maximum allowable energy consumption, converted to MWh.

Calculate the *Benchmark Electricity Consumption* and *Benchmark Gas Consumption* in MWh by using the NABERS Reverse Calculator for the relevant NABERS method, setting the target star rating to the *Benchmark NABERS Rating*, and giving all other input parameters the same value as for the actual NABERS Rating over that NABERS Rating Period, including:

- Rating type;
- Building information (e.g. Rated Area, number of computers); and
- Percentage breakdown of energy consumption (on an energy use basis in MWh).

If necessary for use with the relevant NABERS Reverse Calculator, round the down the *Benchmark NABERS Rating* to the nearest half or whole star increment.

Step 4 – Calculate Energy Savings

Calculate *Electricity Savings and Gas Savings*, in MWh as follows:

$$\text{Electricity Savings} = (\text{Benchmark Electricity Consumption} - \text{Measured Electricity Consumption}) \times \text{Regional Network Factor}$$

$$\text{Gas Savings} = \text{Benchmark Gas Consumption} - \text{Measured Gas Consumption}$$

Where:

Regional Network Factor, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

8.9 Aggregated Metered Baseline

Note: The Aggregated Metered Baseline sub-method allows for Energy Savings to be calculated on the basis of measured savings across a group of electricity and/or natural gas customers, using statistical techniques. To use this method, the Accredited Certificate Provider must engage an Accredited Statistician to verify the Site allocation and statistical method prior to the Implementation Date. This method may be used for any Recognised Energy Saving Activity, but it is best suited to those activities where:

- Energy Savings are small on a Site by Site basis; and/or
- Energy Savings can vary greatly from Site to Site; and/or
- there is insufficient evidence that the Recognised Energy Saving Activity will not be reversed.

This method requires a group of energy customers (the Population) to be assigned without bias into a Treatment Group and a Control Group. The Treatment Group is offered goods or services that are designed to deliver

Energy Savings over the Implementation Period. The Treatment is the offering of goods and services (and any subsequent provision, engagement and promotion activities) and is not just the provision of goods and services. The Control Group is not offered the Treatment, but instead is used to estimate what the energy consumption of the Treatment Group would have been in the absence of the Treatment.

- 8.9.1 The Energy Savings for an Implementation may be calculated using **Method 5.1** provided that all of the conditions in clauses 8.9.2 to 8.9.11 are met.
- 8.9.2 For each Implementation, a number of Sites must be identified and assigned to a Population, and every Site in that Population must be allocated to either a Treatment Group or a Control Group prior to the Implementation Date. Additionally:
- (a) a Site may choose to join the Population, but once in the Population, must be allocated to the Treatment Group or the Control Group using an Unbiased Selection Method;
 - (b) Prior to allocating the Site to the Treatment Group or the Control Group, the Accredited Certificate Provider must:
 - (i) choose for each Site that is or will be in the Population, whether to measure the consumption of electricity or natural gas (or both), subject to clause 8.9.2(f)(ii); and
 - (ii) not decide which energy source(s) are included for measurement based on whether the Site is subsequently allocated in the Treatment Group or the Control Group; and
 - (iii) Where the Population includes Sites that have measurements of different energy source combinations, ensure that the Treatment Group size to Control Group size ratio is, as close as possible, the same for each of the energy source combinations (electricity only; natural gas only; both electricity and natural gas).
 - (c) persons at Sites must not be informed explicitly that they have been allocated to the Treatment Group or the Control Group;
 - (d) once a Site has been allocated to the Treatment Group and the Implementation Date has occurred, persons managing End-User Equipment at that Site may be offered a choice as to whether they wish to receive the goods and services component of the Treatment;
 - (e) if a Site chooses not to receive the goods and services component of the Treatment, that Site must be retained in the Treatment Group for measurement purposes, except where clauses 8.9.2(f) and 8.9.2(g) apply;
 - (f) the Population should not be targeted with the offer of goods and services that:
 - (i) are aimed at increasing electricity or natural gas use with the intent of creating a greater difference in electricity or natural gas use between the Control Group and Treatment Group; or
 - (ii) promote switching from using grid electricity to natural gas, or vice versa, if both grid electricity and natural gas consumptions are not measured at all Sites in the Population; or
 - (iii) promote switching to a non-renewable energy source other than grid electricity or natural gas.
 - (g) a Site must be removed from the Population, and hence Treatment Group or Control Group, if Measured Electricity Consumption or Measured Gas Consumption data or both, as per Clause 8.9.2(b)(i), are not available for that Site during the Implementation Period;
 - (h) all Sites with Measured Electricity Consumption or Measured Gas Consumption data or both, as per Clause 8.9.2(b)(i), for only part of an Implementation Period due to Attrition, must be:
 - (i) removed from the Population; or
 - (ii) included in the Population until the last date Measured Electricity Consumption or Measured Gas Consumption data or both, are available for a given Site; and

- (i) if data for a Pre-Implementation Period are used, the Accredited Certificate Provider must specify prior to the Implementation Date a period for which the data are available for the total Population.

8.9.3 Measurements of electricity consumption under this method must use Measured Electricity Consumption data for each Site in the Population, where the Measured Electricity Consumption for a Measurement Period means the metered amount of electricity used by a Site:

- (a) as determined by the metering data held by the Electricity Retailer or Network Service Provider for that Site, pro-rated across the period, as measured and estimated in accordance with the provisions of the National Energy Retail Rules under the National Energy Retail Law, and in accordance with the provisions of the *Electricity Supply (General) Regulation 2001* (NSW); or
- (b) from a metering arrangement compliant with the accuracy requirements of National Measurement Institute document M6 (Electricity Meters), or another metering benchmark accepted by the Scheme Administrator, provided that:
 - (i) all metering devices are installed without bias as to whether that Site is in the Treatment Group or Control Group, and by parties who have no knowledge of whether each Site is part of the Treatment Group or Control Group; and
 - (ii) the reading of metering devices and checking, measurement, estimation and pro-rating of data is done without bias as to whether that Site is in the Treatment Group or Control Group, and by parties who have no knowledge of whether each Site is part of the Treatment Group or Control Group.

8.9.3A Measurements of natural gas consumption under this method must use Measured Gas Consumption data for each Site in the Population, where the Measured Gas Consumption for a Measurement Period means the metered amount of natural gas used by a Site:

- (a) as determined by the metering data held by the Gas Retailer or gas network operator for that Site, pro-rated across the period, as measured and estimated in accordance with the provisions of the National Energy Retail Rules under the National Energy Retail Law, and in accordance with the provisions of the Gas Supply (Consumer Safety) Regulation 2012 ; or
- (b) from a metering arrangement compliant with the accuracy requirements of National Measurement Institute document R137 (Gas Meters), or another metering benchmark accepted by the Scheme Administrator, provided that:
 - (i) all metering devices are installed without bias as to whether that Site is in the Treatment Group or Control Group, and by parties who have no knowledge of whether each Site is part of the Treatment Group or Control Group; and
 - (ii) the reading of metering devices and checking, measurement, estimation and pro-rating of data is done without bias as to whether that Site is in the Treatment Group or Control Group, and by parties who have no knowledge of whether each Site is part of the Treatment Group or Control Group.

8.9.4 For the purposes of calculating Energy Savings, the Measured Electricity Consumption or Measured Gas Consumption data or both, for a given Population must be recorded over one or more Measurement Periods, where:

- (a) Implementation Periods and Pre-Implementation Periods are both Measurement Periods;
- (b) the Implementation Period and the Pre-Implementation Period do not have to be immediately sequential in time;
- (c) Measurement Periods must not overlap; and
- (d) each Implementation Period must be at least 3 months and no more than 15 months in length.

8.9.4A Measured Energy Consumption is calculated for each Site in the Population in accordance with **Equation 8.9.1**

Equation 8.9.1

$$\begin{aligned} \text{Measured Energy Consumption} \\ = \text{Measured Electricity Consumption} \times \text{Regional Network Factor} + \\ \text{Measured Gas Consumption} \times \frac{\text{Gas Certificate Conversion Factor}}{\text{Electricity Certificate Conversion Factor}} \end{aligned}$$

Where:

- *Regional Network Factor* is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites where the Implementation(s) took place
- *Electricity Certificate Conversion Factor* is 1.06, as specified the Act, or as amended by Regulation.
- *Gas Certificate Conversion Factor* is 0.39, as specified in the Act, or as amended by Regulation.

- 8.9.5 For the purposes of section 131 of the Act, Energy Savings for each Implementation are taken to have occurred on the last date of that Implementation Period.
- 8.9.6 Where required, the Energy Savings for the Implementation will be the sum of estimated Energy Savings for all Sites in a Treatment Group for each Implementation Period.
- 8.9.7 The records that must be kept of the method, data and assumptions used to calculate Energy Savings under Method 5.1 must include:
- (a) the Addresses of the Sites in the Population and whether they are allocated to the Treatment Group or the Control Group;
 - (b) evidence that Sites were assigned to the Population and were allocated to the Treatment Group and Control Group in accordance with clause 8.9.2;
 - (c) information on metering arrangements used according to clause 8.9.3 and 8.9.3A;
 - (d) information on the Treatment offered to the Treatment Group;
 - (e) verification in writing (together with reasoning) from an Accredited Statistician prior to the Implementation Date, that the:
 - (i) method that will be used to allocate Sites from the Population into the Control Group and the Treatment Group is unbiased;
 - (ii) analysis method used to calculate the observed Energy Savings in Step 2 of Method 5.1 has been selected and is valid;
 - (iii) explanatory variables, including any interactions between them, have been documented if Method 5.4 is used;
 - (iv) lengths of the Implementation Period and the Pre-Implementation Period (if applicable) have been determined and documented;
 - (f) information on Sites removed from the Population in accordance with clauses 8.9.2(f) and 8.9.2(g), including reasoning for each Site's removal;
 - (g) documentation of reproducible steps and log files for the calculations performed; and
 - (h) any additional requirements as may be Published by the Scheme Administrator from time to time.
- 8.9.8 The Accredited Certificate Provider can only modify the methods in clause 8.9.7(e) for subsequent Implementation Periods. If modified, the Accredited Certificate Provider must obtain from an Accredited

Statistician prior to the Implementation Date of the subsequent Implementation Periods, a new verification in writing.

- 8.9.9 The Implementation Date is the start date of the Implementation Period.
- 8.9.10 The Energy Saver is the person who holds the Measured Electricity Consumption or Measured Gas Consumption data or both, for all Sites in a Population in accordance with clause 8.9.3 or 8.9.3A.
- 8.9.11 For the purposes of this clause 8.9, the requirements under clause 6.8 are as Published by the Scheme Administrator for the purposes of this calculation method.

Method 5.1

Calculation of Energy Savings under the Aggregated Metered Baseline sub-method

Step (1) – For each Population, adjust the Control Group and the Treatment Group for Attrition at the end of each Implementation Period, in accordance with clause 8.9.2. The number of Sites in the Treatment and Control Groups will be designated N_T and N_C respectively.

Step (2) – Calculate the *Observed Energy Savings*, $ES_{observed}$, in MWh, over the Implementation Period using one of the following methods:

- (a) Method 5.2 (Time-Aggregated Energy Consumption During the Implementation Period); or
- (b) Method 5.3 (Time-Aggregated Energy Consumption During the Implementation and Pre-Implementation Periods - Difference in Differences); or
- (c) Method 5.4 (Regression Modelling).

Step (3) – The Scheme Administrator may provide the Accredited Certificate Provider with an estimate of *Uplift Energy Savings*, ES_{uplift} , over the Implementation Period using:

- (a) Method 5.5 (Estimation of Uplift Energy Savings); or
- (b) another method as published by the Scheme Administrator.

If the Scheme Administrator does not provide an estimate of *Uplift Energy Savings*, the value of *Uplift Energy Savings* must be taken to be zero.

Unless otherwise notified by the Scheme Administrator, the Accredited Certificate Provider must provide the Scheme Administrator with data required to estimate *Uplift Energy Savings*, including the Addresses of Sites in the Treatment Group and Control Group; the Implementation Period data; and any other data, as requested by the Scheme Administrator.

For Sites with Measured Electricity Consumption or Measured Gas Consumption data or both, as per Clause 8.9.2(b)(i), for part of an Implementation Period due to Attrition, the date of Attrition is considered the last date of the Implementation Period for those given Sites.

Step (4) - Calculate *Electricity Savings* in MWh, by subtracting the effect of *Uplift Energy Savings* from the *Observed Energy Savings*, ensuring the result is non-negative:

$$\text{Electricity Savings} = \max(0, ES_{observed} - ES_{uplift})$$

Method 5.2

Calculation of *Observed Energy Savings* from Time-Aggregated Energy Consumption During the

Implementation Period

Step (1) - Calculate the mean daily energy use of the Treatment Group (E_T) over the Implementation Period:

$$E_T = \frac{(\sum_s E_s)}{(\sum_s D_s)}$$

where:

- s indexes over Sites in the Treatment Group
- E_s is the Measured Energy Consumption for Site (s) in the Treatment Group over the Implementation Period, calculated in accordance with clause 8.9.4A of this Rule; and
- D_s is number of days of Measured Energy Consumption at Site (s) in the Treatment Group over the Implementation Period

Step (2) - Calculate the mean daily energy use of the Control Group (E_C) over the Implementation Period:

$$E_C = \frac{(\sum_s E_s)}{(\sum_s D_s)}$$

where:

- s indexes over Sites in the Control Group
- E_s is the Measured Energy Consumption for Site (s) in the Control Group over the Implementation Period, calculated in accordance with clause 8.9.4A of this Rule; and
- D_s is number of days of Measured Energy Consumption at Site (s) in the Control Group over the Implementation Period

Step (3) - Using the Treatment Group measurements, the Control Group measurements and the standard error for the Control Group mean, perform the following hypothesis test:

$$H_0 : E_C \leq E_T$$

$$H_{alt} : E_C > E_T$$

$$\text{Calculate } t = (E_C - E_T) / \left(sd * \sqrt{\frac{f_{pcT}}{N_T} + \frac{f_{pcC}}{N_C}} \right)$$

$$\text{Reject } H_0 \text{ (and accept } H_{alt}) \text{ if } t > T_{(p=0.95)}$$

where:

- sd is the standard deviation of mean daily energy use at Sites in the Control Group in the Implementation Period, weighted by the number of days in the Implementation Period for which there is data about Measured Energy Consumption at Sites in the Control Group, as worked out using the formula

$$sd = \sqrt{\left\{ \sum_s f_s * \left(\frac{E_s}{D_s} - E_C \right)^2 \right\} * \frac{N_C}{N_C - 1}}$$

where:

f_s means the number of days in the Implementation Period for which there is data about Measured Energy Consumption at Site (s), as a proportion of the sum of all the days in the Implementation Period for which there is data about Measured Energy Consumption at Sites in the Control Group, as follows:

$$f_s = D_s / (\sum_s D_s)$$

- N_C is the number of Sites in the Control Group and N_T is number of Sites in the Treatment Group;
- $T_{(p=0.95)}$ is the value from standard T tables with $(N_C - 1)$ degrees of freedom. For degrees of freedom exceeding 2400 use the value of 1.6449. Note that 0.95 values of the T statistic are from the upper 5% points of the distribution;
- fpc_C is an optional finite population correction for estimating the Population mean from the Control Group, $fpc_C = (N - N_C)/(N - 1)$; and
- fpc_T is an optional finite population correction when using the Population mean to predict the Treatment Group mean, $fpc_T = (N - N_T)/(N - 1)$.

If able to reject H_0 , proceed to step (4). Otherwise, E_C is taken to be less than or equal to E_T and $ES_{observed}$ is taken to be zero.

Step (4) - Calculate the *Observed Energy Savings*, $ES_{observed}$, in MWh, over the Implementation Period:

$$ES_{observed} = (E_C - E_T) * \left(\sum_s D_s \right)$$

where:

- s indexes over Sites in the Treatment Group; and
- D_s is number of days of Measured Energy Consumption at Site (s) in the Treatment Group over the Implementation Period

Method 5.3

Calculation of *Observed Energy Savings* from Time-Aggregated Energy Consumption During the Implementation and Pre-Implementation Periods – Difference in Differences

Step (1) - Calculate the change in mean daily energy use (C_s) between the Implementation Period and the Pre-Implementation Period for each Site in the Population:

$$C_s = E_{s,i} - E_{s,p} * \left(\frac{D_{s,i}}{D_{s,p}} \right)$$

where:

- $E_{s,i}$ is the Measured Energy Consumption at each Site (s) over the Implementation Period, calculated in accordance with clause 8.9.4A of this Rule;
- $E_{s,p}$ is the Measured Energy Consumption at Site (s) over the Pre-Implementation Period, calculated in accordance with clause 8.9.4A of this Rule;
- $\left(\frac{D_{s,i}}{D_{s,p}} \right)$ corrects for minor differences in length of Implementation Period compared to Pre-Implementation Period due to leap year;
- $D_{s,i}$ is the number of days of over the Implementation Period for which there is data about Measured Energy Consumption at Site (s); and
- $D_{s,p}$ is the number of days in the Pre-Implementation Period and must cover the same period of time in a previous year as $D_{s,i}$.

Step (2) - Calculate the change in mean daily energy use of the Treatment Group (C_T) between the Implementation Period and the Pre-Implementation Period:

$$C_T = \frac{\sum_s C_s}{\sum_s D_{s,i}}$$

where:

- s indexes over Sites in the Treatment Group; and
- $D_{s,i}$ is the number of days over the Implementation Period for which there is data about Measured Energy Consumption at Site (s).

Step (3) - Calculate the change in mean daily energy use of the Control Group (C_C) between the Implementation Period and the Pre-Implementation Period:

$$C_C = \frac{\sum_s C_s}{\sum_s D_{s,i}}$$

where:

- s indexes over Sites in the Control Group; and

$D_{s,i}$ is the number of days over the Implementation Period for which there is data about Measured Energy Consumption at Site (s).

Step (4) - Using the Treatment Group measurements, the Control Group measurements and the standard error for the Control Group mean difference, perform the following hypothesis test:

$$H_0 : C_C \leq C_T$$

$$H_{alt} : C_C > C_T$$

$$\text{Calculate } t = (C_C - C_T) / \left(sd * \sqrt{\frac{f_{pCT}}{N_T} + \frac{f_{pCC}}{N_C}} \right)$$

$$\text{Reject } H_0 \text{ (and accept } H_{alt} \text{) if } t > T_{(p=0.95)}$$

where:

- sd is the standard deviation of change, between the Pre-Implementation Period and Implementation Period, in the mean daily energy use at Sites in the Control Group, weighted by the number of days in the Implementation Period for which there is data about Measured Energy Consumption at Sites in the Control Group, as worked out using the formula

$$sd = \sqrt{\left\{ \sum_s f_s * \left(\frac{C_s}{D_{s,i}} - C_C \right)^2 \right\} * \frac{N_C}{N_C - 1}}$$

where:

f_s means the number of days in the Implementation Period for which there is data about Measured Energy Consumption at Site (s), as a proportion of the sum of all the days in the Implementation Period for which there is data about Measured Energy Consumption at Sites in the Control Group, as follows:

$$f_s = \frac{D_{s,i}}{(\sum_s D_{s,i})}$$

- N_C is number of Sites in the Control Group and N_T is number of Sites in the Treatment Group;

- $T_{(p=0.95)}$ is the value from standard T tables with $(N_C - 1)$ degrees of freedom. For degrees of freedom exceeding 2400 use the value of 1.6449. Note that 0.95 values of the T statistic are from the upper 5% points of the distribution;
- fpc_C is an optional finite population correction for estimating the Population mean from the Control Group, $fpc_C = (N - N_C)/(N - 1)$; and
- fpc_T is an optional finite population correction when using the Population mean to predict the Treatment Group mean, $fpc_T = (N - N_T)/(N - 1)$.

If able to reject H_0 , proceed to step (5). Otherwise, C_C is taken to be less than or equal to C_T and $ES_{observed}$ is taken to be zero

Step (5) – Calculate the *Observed Energy Savings*, $ES_{observed}$, in MWh, over the Implementation Period:

$$ES_{observed} = (C_C - C_T) * \left(\sum_s D_s \right)$$

where:

- s indexes over Sites in the Treatment Group; and
- $D_{s,i}$ is the number of days over the Implementation Period for which there is data about Measured Energy Consumption at Site (s).

Method 5.4

Calculation of *Observed Energy Savings from Regression Modelling*

Step (1) - Calculate the mean daily energy use ($DE_{s,i}$) for each Site in the Population for the Implementation Period:

$$DE_{s,i} = E_{s,i}/D_{s,i}$$

where:

- $E_{s,i}$ is the Measured Energy Consumption for Site (s) over the Implementation Period, calculated in accordance with clause 8.9.4A of this Rule; and
- $D_{s,i}$ is the number of days of Measured Energy Consumption at Site (s) over the Implementation Period

Step (2) - Calculate the mean daily energy use ($DE_{s,p}$) for each Site in the Population for the Pre-Implementation Period:

$$DE_{s,p} = E_{s,p}/D_{s,p}$$

where:

- $E_{s,p}$ is the Measured Energy Consumption for each Site (s) over the Pre-Implementation Period, calculated in accordance with clause 8.9.4A of this Rule; and
- $D_{s,p}$ is the number of days of Measured Energy Consumption at Site (s) over the Pre-Implementation Period.

Step (3) - Create the evaluation data set consisting of one observation for each Site in the Population containing $DE_{s,i}$, $DE_{s,p}$, T_s and other appropriate explanatory variables, where:

- T_s is a variable taking the value 1 if a Site (s) is in the Treatment Group and 0 if it is in the Control Group; and
- $OtherVariables_s$ is the vector of other appropriate explanatory variables.

Step (3B) – For cases where there are Sites with Measured Energy Consumption data for part of an Implementation Period due to Attrition, create another variable $W_{s,m}$, where:

- $W_{s,m}$ is a variable taking the value 1 if the Site (s) has Measured Energy Consumption during time period m and 0 otherwise. $m = 1 \dots NTP$; and
- NTP is the number of non-overlapping and exhaustive time periods for the implementation.
- The time periods are to be allocated so that each time period has (as close as is possible) the same number of Sites subject to Attrition during that period.

Step (4) - Estimate the average treatment effect per day ($\hat{\beta}$) by estimating the following regression via Weighted Least Squares (WLS) and weighting by $D_{s,i}$:

$$DE_{s,i} = \alpha + \beta T_s + \delta DE_{s,p} + \sum \lambda_m W_{s,m} + \sum \gamma_k OtherVariables_{s,k} + \varepsilon_s$$

where:

- α is the intercept;
- β is the treatment effect;
- δ is the impact of Pre-Implementation Period energy consumption;
- λ_m accounts for time period (m) variation;
- γ_k is the effect of the kth other explanatory variable, $k=1 \dots K$ where K is the total number of other explanatory variables;; and
- ε_s is the error term.

Step (5) – Using the estimated treatment effect (denoted as $\hat{\beta}$) and its standard error perform the following hypothesis test:

$$H_0: \hat{\beta} \geq 0$$

$$H_{alt}: \hat{\beta} < 0$$

$$\text{Calculate } t = \hat{\beta} / se(\hat{\beta})$$

$$\text{Reject } H_0 \text{ (and accept } H_{alt}) \text{ if } t < T_{(p=0.05)}$$

where:

- $se(\hat{\beta})$ is the standard error of $\hat{\beta}$; and
- $T_{(p=0.05)}$ is the value from the standard T table with $N_T + N_C - (3 + K + NTP)$ degrees of freedom. For degrees of freedom exceeding 2400 use the value of -1.6449 . Note that 0.05 values of the T statistic are from the lower 5% points of the distribution.

A negative value for $\hat{\beta}$ indicates a reduction in energy usage. Therefore, if able to reject H_0 , proceed to step (6). Otherwise, $\hat{\beta}$ is taken to be non-negative and $ES_{observed}$ is taken to be zero.

Step (6) – Calculate the *Observed Energy Savings*, $ES_{observed}$, in MWh, over the Implementation Period:

$$ES_{observed} = -\hat{\beta} * \left(\sum_s D_s \right)$$

where:

- s indexes over Sites in the Treatment Group; and
- D_s is the number of days of Measured Energy Consumption at Site (s) in the Treatment Group over the Implementation Period.

Method 5.5 - Estimation of *Uplift Energy Savings*

Step (1) – Estimate the *Lifetime Energy Savings*, $LES_{s,a}$, from each *Other Activity* (a) implemented in each Site (s) in the Population, within the Implementation Period.

Where:

- *Other Activity* (a) means either:
 - any other Recognised Energy Saving Activity, apart from the Recognised Energy Saving Activity that is the subject of this calculation; or
 - an activity referred to in clauses 5.4(f), 5.4(g) or 5.4(h) of this Rule.

Step (2) – Calculate the Energy Savings, $ES_{s,a}$, for each Site s due to each *Other Activity* a during the Implementation Period:

$$ES_{s,a} = LES_{s,a} * \left(\frac{Overlap_a}{Lifetime_a} \right)$$

where:

- $Lifetime_a$, in years, is the Lifetime of the Energy Savings for each *Other Activity* (a), or 10 years if it is not defined in this Rule; and
- $Overlap_a$, in years, is the length of time of the Implementation Period that overlaps with the Lifetime of the Energy Savings for each *Other Activity* (a).
- If the *Other Activity* (a) had one or more Energy Savings calculated using the Metered Baseline Method, then the Lifetime of the Energy Savings is the length of the Measurement Period of that calculation.
- The calculation of the duration of overlap must take account of Attrition of Sites.

Step (3) - Calculate the average Energy Savings, $ES_{T,all Other Activities}$ and $ES_{C,all Other Activities}$, due to all *Other Activities* (a) for all Sites in the Treatment Group and Control Group respectively, over the Implementation Period:

$$ES_{T,all Other Activities} = \frac{\sum_{s \text{ in Treatment Group}, a} ES_{s,a}}{N_T}$$

and

$$ES_{C,all Other Activities} = \frac{\sum_{s \text{ in Control Group}, a} ES_{s,a}}{N_C}$$

where:

- The summation is over all Sites (s) in the Treatment Group (for $ES_{T,all Other Activities}$) and Control Group (for $ES_{C,all Other Activities}$), respectively, and all *Other Activities* that overlap with the Implementation Period; and
- The N_T and N_C are the number of Sites in the Treatment Group and Control Group respectively for Implementation Period.

Step (4) - Calculate the *Uplift Energy Savings*, ES_{uplift} , from *Other Activities* due to participation in the program:

$$ES_{uplift} = (ES_{T,all\ Other\ Activities} - ES_{C,all\ Other\ Activities}) * N_T$$

Step (5) - Ensure the *Uplift Energy Savings*, ES_{uplift} , are non-negative:

$$ES_{uplift} = \max(0, ES_{uplift})$$

9 Deemed Energy Savings Method

Note: The Deemed Energy Savings Method can be used for the replacement, installation and delivery of common End-User Equipment such as lighting, refrigerators and electric motors.

9.1 Energy Savings for Implementations may be calculated in accordance with:

- (a) clause 9.3 (Sale of New Appliances), for the Activity Definitions set out in Schedule B;
- (b) clause 9.4 (Commercial Lighting Energy Savings Formula);
- (c) clause 9.4A (Public Lighting Energy Savings Formula);
- (d) clause 9.5 (High Efficiency Motor Energy Savings Formula);
- (e) clause 9.6 (Power Factor Correction Energy Savings Formula);
- (f) clause 9.7, (Removal of Old Appliances), for the Activity Definitions set out in Schedule C;
- (g) clause 9.8, (Home Energy Efficiency Retrofits), for the Activity Definitions set out in Schedules D and E;
- (h) clause 9.9, (High Efficiency Appliances for Businesses), for the Activity Definitions set out in Schedule F; or
- (i) clause 9.10, (1-for-1 Residential Downlight Replacement), for the Activity Definitions set out in Schedule G.

9.2 For the purposes of section 131 of the Act, where the Energy Savings for an Implementation are calculated using the Deemed Energy Savings Method in this clause 9, those Energy Savings are taken to occur on the Implementation Date.

9.2A Acceptable End-User Equipment

9.2A.1 In addition to any other requirements set out in this Rule (such as Equipment Requirements), the Scheme Administrator may Publish further requirements for End-User Equipment that may be used for the purposes of any method under this clause 9.

9.2A.2 The Scheme Administrator may Publish, from time to time, a list of Products that are accepted by the Scheme Administrator as meeting the Equipment Requirements referred to in clause 9 by:

- (a) Publishing a detailed list identifying each Product;
- (b) Publishing a reference to a list from a certifying body, along with any restrictions on that list; and/or

- (c) Publishing a requirement for labelling in accordance with a labelling scheme, along with any restrictions on that labelling.

9.2A.3 Subject to clause 9.2A.4, any Accredited Certificate Provider (or other persons as Published by the Scheme Administrator), may apply to the Scheme Administrator to have a Product accepted as meeting such Equipment Requirements, provided that they:

- (a) apply in a form and manner required by the Scheme Administrator;
- (b) pay any fee required by the Scheme Administrator in respect of the investigation and determination of the application on a cost recovery basis and including an allowance for:
 - (i) the recovery by the Scheme Administrator of its costs in establishing, operating and maintaining the systems and databases required in connection with the assessment, acceptance and rejection of applications made under this clause 9.2A.3;
 - (ii) the exercise of the Scheme Administrator's powers under clauses 9.2A.2 and 9.2A.5; and
 - (iii) the payment and collection of fees under this clause 9.2A.3(b);
- (c) identify the Product; and
- (d) provide evidence that the Product meets all of the Equipment Requirements.

9.2A.4 The Scheme Administrator may limit the number of applications that may be made during a period under clause 9.2A.3, either in aggregate or by particular persons or classes of persons, by Publishing a notice that sets out that period and limit.

9.2A.5 The Scheme Administrator may, at any time, cease to accept a Product as meeting the Equipment Requirements, provided that it:

- (a) notifies all Accredited Certificate Providers accredited for the relevant Recognised Energy Saving Activity of the change and the reason for the change, prior to the Product ceasing to be accepted for this purpose; and
- (b) ensures that all Published lists reflect the change in a timely manner.

9.2A.6 The Scheme Administrator may reject an application made under clause 9.2A.3 where the applicant has not provided additional information requested by the Scheme Administrator in support of that application within a timeframe Published by the Scheme Administrator.

9.3 Sale of New Appliances

9.3.1 The Energy Savings for an Implementation may be calculated using **Equation 5**, provided that:

- (a) each item of End-User Equipment meets the Equipment Requirements in one of the Activity Definitions set out in Schedule B;
- (b) each item of End-User Equipment was sold by an Appliance Retailer;
- (c) each item of End-User Equipment was new at the time it was sold by the Appliance Retailer;
- (d) each item of End-User Equipment was delivered to an Address, or was sold to a Purchaser with an Address recorded by the Appliance Retailer; and
- (e) compliance with the requirements in clauses (a) to (d) above is evidenced by a tax invoice and/or other evidence acceptable to the Scheme Administrator.

9.3.2 For the purposes of clause 5.3(a), End-User-Equipment under clause 9.3 is deemed to be installed upon its sale;

- 9.3.3 For the purposes of clause 6.8, the Site of the Implementation is the Address referred to in clause 9.3.1 (d) of this Rule.
- 9.3.4 The Implementation Date is the date that the End-User Equipment was sold.
- 9.3.5 The Energy Saver is the Appliance Retailer who sells the End-User Equipment to a Purchaser.
- 9.3.6 (deleted)

Equation 5

For each Implementation:

$$\text{Electricity Savings} = \sum \text{Deemed Equipment Electricity Savings} \times \text{Regional Network Factor}$$

Where:

- the summation is over all items of End-User Equipment that have been sold as part of the Implementation; and
- *Deemed Equipment Electricity Savings*, in MWh, for each item of End-User Equipment are calculated according to the respective Activity Definition **B1, B2, B3, B4, B5, B6, or B7** of Schedule B.
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

9.4 Commercial Lighting Energy Savings Formula

- 9.4.1 The Energy Savings for an Implementation may be calculated using **Equations 6 and 9** and either **7 or 8**, provided that:
- (a) the activity is a Lighting Upgrade of:
 - (i) Lighting for Roads and Public Spaces;
 - (ii) Traffic Signals; or
 - (iii) Building Lighting;
 - (b) the Lighting Upgrade meets or exceeds the relevant lighting standards for each upgrade, to the satisfaction of the Scheme Administrator;
 - (c) if the Lighting Upgrade is of Building Lighting, then each space, after implementation of the Lighting Upgrade must, to the satisfaction of the Scheme Administrator, achieve:
 - (i) the relevant requirements of AS/NZS 1680, specifically including but not limited to maintained illuminance accounting for lumen depreciation, control of glare, and uniformity of illuminance, or another benchmark approved by the Scheme Administrator where the Lighting Upgrade is outside the scope of AS/NZS1680;
 - (ii) the requirements of the BCA section F4.4, Safe Movement (as updated from time to time);
 - (iii) an IPD that equals or is less than the maximum IPD for each space, as defined in Part J6 of the BCA; and
 - (iv) any other minimum performance requirements as Published by the Scheme Administrator;
 - (d) the Lighting Upgrade is performed by appropriately trained persons, according to requirements Published by the Scheme Administrator, and is undertaken by or under the supervision of a licensed electrician;

- (e) the Purchaser pays a net amount of at least \$5 (excluding GST) per MWh of Electricity Savings, which must not be reimbursed, for the goods or services making up the Implementation, as evidenced by a tax invoice and/or other evidence acceptable to the Scheme Administrator; and
- (f) each item of End-User Equipment used in the Lighting Upgrade is listed in Table A9.1 or Table A9.3, and if it is End-User Equipment listed in Table A9.3, that item is accepted by the Scheme Administrator as meeting the Equipment Requirements specified in Table A9.4.
- (g) If the Lighting Upgrade is of Lighting for Roads and Public Spaces, then the Lighting Upgrade, must, to the satisfaction of the Scheme Administrator, achieve:
- (i) the requirements of the AS/NZS 1158 series of standards; or
 - (ii) any other standard or benchmark specified by the Scheme Administrator.

9.4.2 The Implementation Date is the date when the Lighting Upgrade was completed.

9.4.3 The Energy Saver is the Purchaser.

9.4.4 (deleted).

Equation 6

For each Implementation:

$$\text{Electricity Savings} = [\text{Baseline Consumption} - \text{Upgrade Consumption}] \times \text{Regional Network Factor}$$

Where:

- *Baseline Consumption*, in MWh, is calculated:
 - using **Equation 7**, if the Lighting Upgrade is part of a refurbishment that would not have been required to comply with the BCA Part J6, had the Lighting Upgrade component of the refurbishment not occurred;
 - using **Equation 7** if the Lighting Upgrade is part of a refurbishment that would have been required to comply with the BCA Part J6, had the Lighting Upgrade component of the refurbishment not occurred and where the existing lighting meets or is below the maximum IPD requirements of the BCA Part J6; or
 - using **Equation 8** if the Lighting Upgrade is part of a refurbishment that would have been required to comply with the BCA Part J6, had the Lighting Upgrade component of the refurbishment not occurred, and where the existing lighting does not meet the IPD requirements of the BCA Part J6.
- *Upgrade Consumption*, in MWh, is calculated using **Equation 9**
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

Equation 7

Baseline Consumption (MWh) =

$$\sum_{\text{Each Incumbent Lamp}} (LCP \times \text{Asset Lifetime} \times \text{Annual Operating Hours} \times CM \times AM) \div 10^6$$

Where:

- *Each Incumbent Lamp* means each Lamp and Control Gear in the pre-existing lighting system;
- *LCP*, in Watts, is the default lamp circuit power corresponding to that type of Lamp and Control Gear for that End-User Equipment as set out in **Table A9.2** or **Table A9.4** of Schedule A, representing the power drawn by the Lamp, plus the losses of its Control Gear;
- *Asset Lifetime*, in years, is the default lifetime of the Lighting Upgrade for the relevant End-User Equipment as used in **Equation 9**;
- *Annual Operating Hours*, in hours/year, is the default number of hours per annum that the upgraded lighting system is expected to operate for the relevant building and space type as set out in **Table A10.2** of Schedule A ;
- *CM* is the control multiplier. If the Lamp is connected to a Control System, the factor for the control multiplier shall be applied for the relevant End-User Equipment or activity as set out in **Table A10.4** of Schedule A to this Rule, otherwise $CM = 1.0$; and.
- *AM* is the air-conditioning multiplier for the space as used in **Equation 9**.

Equation 8

Baseline Consumption (MWh)=

$$\sum_{\text{Each Space}} (IPD \times Area \times Asset Lifetime \times Annual Operating Hours \times AM) \div 10^6$$

Where:

- *Each Space* means each portion of space within the Site requiring a different IPD as defined in Part J6 of the BCA;
- *IPD*, in Watts/m², is the maximum allowable IPD for each space, as required by Table J6.2a of the BCA. For simplicity, the Scheme Administrator may take a weighted average of similar IPDs in the Commercial Lighting Energy Savings Formula.
- *Area*, in m², is the area of Each Space;
- *Asset Lifetime*, in years, is the default lifetime of the Lighting Upgrade for the relevant End-User Equipment as used in **Equation 9**;
- *Annual Operating Hours*, in hours/year, is the default number of hours per annum that the upgraded lighting system is expected to operate for the relevant building and space type as set out in **Table A10.2** of Schedule A; and
- *AM* is the air-conditioning multiplier for the space as used in **Equation 9**.

Equation 9

Upgrade Consumption (MWh) =

$$\sum_{\text{Each Upgrade Lamp}} (LCP \times Asset Lifetime \times Annual Operating Hours \times CM \times AM) \div 10^6$$

Where:

- *Each Upgrade Lamp* means each Lamp and Control Gear in the upgraded lighting system.
- *LCP*, in Watts, is the default lamp circuit power corresponding to that type of Lamp and Control Gear for that End-User Equipment as set out in **Table A9.2** or **Table A9.4** of Schedule A, representing the power drawn by the Lamp, plus the losses of its Control Gear;

- *Asset Lifetime*, in years, is the default lifetime of the Lighting Upgrade for the relevant End-User Equipment as set out in **Table A10.1** of Schedule A, or another value accepted by the Scheme Administrator;
- *Annual Operating Hours*, in hours/year, is the default number of hours per annum that the upgraded lighting system is expected to operate for the relevant building and space type as set out in **Table A10.2** of Schedule A.
- *CM* is the control multiplier. If the Lamp is connected to a Control System, the factor for the control multiplier shall be applied for the relevant End-User Equipment or activity as set out in **Table A10.4** of Schedule A, otherwise $CM = 1.0$; and
- *AM* is the air-conditioning multiplier for the space, after Implementation, as set out in **Table A10.5** of Schedule A.

9.4A Public Lighting Energy Savings Formula

9.4A.1 The Energy Savings for an Implementation may be calculated using **Equations 6, 7 and 9** of Clause 9.4, provided that:

- (a) the activity is a Lighting Upgrade of:
 - (i) Lighting for Roads and Public Spaces; or
 - (ii) Traffic Signals; and
- (b) the Luminaire is an asset owned and/or maintained by a Distributor or Roads and Maritime Services; and
- (c) each item of End-User Equipment used in the Lighting Upgrade is listed in Table A9.1 or Table A9.3, and if it is End-User Equipment listed in Table A9.3, that item is accepted by the Scheme Administrator as meeting the Equipment Requirements specified in Table A9.4.

9.4A.2 The Implementation Date is the date when the Lighting Upgrade was completed.

9.4A.3 The Energy Saver is:

- (a) the Distributor or Roads and Maritime Services that is the owner of the Luminaire; or
- (b) the Council or Roads and Maritime Services if they:
 - (i) are a public lighting customer, for billing, regulatory or management purposes, of the Distributor that owns the Luminaire, and
 - (ii) request the Lighting Upgrade from the Distributor that owns the Luminaire, in writing.

9.4A.4 If the Lighting Upgrade involves an existing or replacement Lamp or Luminaire that:

- (a) is registered on a national electricity market load table for unmetered connection points, the device load value listed in that load table must be used as the LCP in **Equations 7 and 9** of clause 9.4.4; or
- (b) is not registered on a national electricity market load table for unmetered connection points, the device load value as listed in a Public Lighting Inventory must be used as the LCP in **Equations 7 and 9** of clause 9.4.4.

9.4A.5 If the Lighting Upgrade involves the installation of a Control System the control multiplier *CM* when calculating Energy Savings using **Equations 6, 7 and 9** of Clause 9.4 must be set equal to 1.

9.5 High Efficiency Motor Energy Savings Formula

9.5.1 The Energy Savings may be calculated using **Equation 12**, provided that:

- (a) the End-User Equipment is a new High Efficiency Motor; and
- (b) the High Efficiency Motor is installed.

9.5.2 The Implementation Date is the date that the High Efficiency Motor was installed.

9.5.3 The Energy Saver is the Purchaser.

9.5.4 (deleted).

9.5.5 An Accredited Certificate Provider may only calculate Energy Savings for an Implementation using **Equation 12** if they were accredited by the Scheme Administrator to create Energy Savings Certificates using the High Efficiency Motor Energy Savings Formula on or before 15 April 2016.

Equation 12

For each Implementation:

$$\text{Electricity Savings} = P \times LUF \times DEI \times \text{Asset Life} \times 8760 \div 1000 \times \text{Regional Network Factor}$$

Where:

- *P*, in kW, is the rated output of the High Efficiency Motor
- *LUF* is the Default Load Utilisation Factors for the relevant High Efficiency Motor as set out in **Table A12** of Schedule A, where the Business Classification and End-Use Service relevant to the Energy Savings is known, or **Table A13** of Schedule A otherwise;
- *DEI* is the default efficiency improvement (as a fraction, not as a percentage) for the relevant High Efficiency Motor as set out in **Table A11** of Schedule A; and
- *Asset Life*, in years, of the High Efficiency Motor is set out in **Table A14** of Schedule A to this Rule for the corresponding rated output of the High Efficiency Motor.
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

9.6 Power Factor Correction Energy Savings Formula

9.6.1 The Energy Savings may be calculated using **Equations 13** and **14**, provided that:

- (a) the capacitors to provide the power factor correction services are installed at a Site where electricity is supplied from the Electricity Network at less than 50 kilovolts (kV);
- (b) the capacitors improve the power factor of the Site to achieve a minimum of 0.9 lagging;
- (c) the capacitors are not installed as part of a mandatory program of installation;
- (d) the capacitors are installed at the main switchboard, where the Site is connected to the Electricity Network; and
- (e) the capacitors are new.

9.6.2 The Implementation Date is the date on which the capacitors were installed.

9.6.3 The Energy Saver is the Purchaser.

9.6.4 (deleted)

Equation 13

For each Implementation:

$$\text{Electricity Savings} = (\text{Power Savings}) / 1000 \times (\text{Annual operating hours}) \times (\text{Site Life}) \times \text{Regional Network Factor}$$

Where:

- *Power Savings*, in kW, is the line loss power savings, less capacitor losses, during operating hours, and is calculated according to **Equation 14**;
- *Annual operating hours*, in hours/year, is the number of hours per year that the Site is operating and equals 1750; and
- *Site Life*, in years, is the expected remaining lifetime of the Site and the capacitors and equals 10.
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

Equation 14

$$\text{Power Savings (kW)} = \text{Real Power} \times 0.7 \times (\text{DLF} - 1) \times (1 - (\text{Initial power factor})^2 / (\text{Final power factor})^2) - 0.0039 \times (\text{Rating of installed capacitors})$$

Where:

- *Real Power*, in kW, is the real power component of the average Site load during operating hours;
- *DLF* is the distribution loss factor for the Distribution District that the Site is connected to, as detailed in Table A19 of Schedule A;
- *Initial power factor* is the power factor of the load before the capacitors are installed, or 0.9, whichever is greater;
- *Final power factor* is the power factor of the load after the capacitors have been installed, or 0.98, whichever is lesser; and
- *Rating of installed capacitors*, in kvar, is the rated reactive power of the installed capacitors.

9.7 Removal of Old Appliances

9.7.1 The Energy Savings for an Implementation may be calculated using **Equation 15**, provided that:

- (a) the Site is a Residential Building or a Small Business Building;
- (b) each item of End-User Equipment meets one of the Equipment Requirements in Activity Definition C1 or C2 of Schedule C, and any additional requirements Published by the Scheme Administrator, noting that the Scheme Administrator may Publish, from time to time, lists of Products that they are satisfied meet those requirements;
- (c) each item of End-User Equipment is removed from the Site and disposed of; and
- (d) compliance with the requirements in clauses 9.7.1(a) to (c) above is evidenced by a copy of the disposal agent's refrigerant handling licence, and/or other evidence acceptable to the Scheme Administrator.

9.7.2 The Implementation Date is the date that the End-User Equipment was removed from the Site.

9.7.3 The Energy Saver is the person who is contracted to remove the End-User Equipment.

Equation 15

For each Implementation:

$$\text{Electricity Savings} = \sum \text{Deemed Equipment Electricity Savings} \times \text{Regional Network Factor}$$

Where:

- the summation is over all items of End-User Equipment that have been removed as part of the Implementation; and
- *Deemed Equipment Electricity Savings*, in MWh, are calculated according to **Activity Definition C1 or C2** of Schedule C.
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

9.8 Home Energy Efficiency Retrofits

9.8.1 The Energy Savings for an Implementation may be calculated using **Equation 16**, provided that:

- (a) the Site is a Residential Building or a Small Business Building;
- (b) a Site Assessment has been conducted on or before the Implementation Date;
- (c) the Eligibility Requirements for the relevant Activity Definition are met immediately prior to the Implementation Date;
- (d) installed End-User Equipment or Products that modify End-User Equipment meet all of the Equipment Requirements for the relevant Activity Definition, and any additional requirements Published by the Scheme Administrator, noting that the Scheme Administrator may Publish, from time to time, lists of Products that it is satisfied meet those requirements;
- (e) the completed Implementation satisfies all of the relevant Implementation Requirements;
- (f) the Accredited Certificate Provider has implemented sufficient activities from Schedule D or Schedule E or both, to create a minimum of:
 - (i) four Energy Savings Certificates if activities have been implemented at the Site or
 - (ii) another amount Published by the Scheme Administrator, which may be subject to any conditions imposed by the Scheme Administrator, if delivered through a Low-income Energy Program; and
- (g) the Purchaser has paid a net amount of at least \$90, excluding GST, which must not be reimbursed, for the Implementation, assessment and other associated works carried out at the Site, as evidenced by a tax invoice and/or other evidence acceptable to the Scheme Administrator, unless delivered through a Low-income Energy Program.

9.8.2 The Implementation Date is the earliest date that all of the conditions of clause 9.8.1 are met.

9.8.3 The Energy Saver is the Purchaser.

9.8.4 (deleted)

- 9.8.5 The activities that make up the Implementation must be identified, recorded and reported to the Scheme Administrator in a manner and form determined by the Scheme Administrator.

Equation 16

For each Implementation:

$$\text{Electricity Savings} = \sum \text{Deemed Activity Electricity Savings} \times \text{Regional Network Factor}$$

$$\text{Gas Savings} = \sum (\text{Deemed Activity Gas Savings})$$

Where:

- the summation is over all activities at the Site in accordance with this clause 9.8; and
- *Deemed Activity Electricity Savings*, in MWh, are calculated according to the Activity Energy Savings formula set out in the relevant **Activity Definition** in **Schedule D** or **Schedule E** for each Implementation at the Site.
- *Deemed Activity Gas Savings*, in MWh, are calculated according to the Activity Energy Savings formula set out in the relevant **Activity Definition** in **Schedule D** or **Schedule E** for each Implementation at the Site.
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

9.9 Installation of High Efficiency Appliances for Businesses

- 9.9.1 The Energy Savings for an Implementation may be calculated using **Equation 17**, provided that:

- (a) each item of End-User Equipment meets the Equipment Requirements in an Activity Definition listed in Schedule F;
- (b) each item of End-User Equipment meets the Installation Requirements as specified in the relevant Activity Definition; and
- (c) each item of End-User Equipment is installed at an Address in an ESS Jurisdiction.

- 9.9.2 The Implementation Date is the date that the End-User Equipment is installed.

- 9.9.3 The Energy Saver is the Purchaser.

- 9.9.4 (deleted)

Equation 17

For each Implementation:

$$\text{Electricity Savings} = \sum \text{Deemed Equipment Electricity Savings} \times \text{Regional Network Factor}$$

Where:

- the summation is over all items of End-User Equipment that have been installed as part of the Implementation; and
- *Deemed Equipment Electricity Savings*, in MWh, for each item of End-User Equipment are calculated according to the relevant **Activity Definition** in Schedule F.
- *Regional Network Factor*, is the value from Table A24 corresponding to the postcode of the Address of the Site or Sites the where the Implementation(s) took place.

9.10 1-for-1 Residential Downlight Replacement

9.10.1 Subject to clause 9.10.5, the Energy Savings for an Implementation may be calculated using **Equation 18**, provided that:

- (a) the Site is a Residential Building or a Small Business Building;
- (b) the Eligibility Requirements for the Activity Definition G1 in Schedule G are met immediately prior to the Implementation Date;
- (c) each item of End-User Equipment is accepted by the Scheme Administrator as meeting all of the Equipment Requirements set out in Activity Definition G1 in Schedule G;
- (d) the completed Implementation satisfies all of the relevant Implementation Requirements; and
- (e) the Purchaser has paid an amount of at least \$90, excluding GST, for the Implementation and other associated works carried out at the Site, as evidenced by a tax invoice and/or other evidence acceptable to the Scheme Administrator.

9.10.2 The Implementation Date is the earliest date that all of the conditions of clause 9.10.1 are met.

9.10.3 The Energy Saver is the Purchaser.

9.10.4 The Purchaser, for the purposes of this clause 9.10, is the person who purchases or leases the goods or services that enable the relevant Energy Savings to be made provided they directly benefit from the ongoing End-Use Services provided by the End-User Equipment that is the subject of the Implementation.

9.10.5 An Accredited Certificate Provider cannot calculate the Energy Savings of an Implementation using **Equation 18** unless:

- (a) on or before 1 October 2014, the Accredited Certificate Provider is authorised to use **Equation 18** to calculate the Energy Savings of a Recognised Energy Saving Activity in accordance with their accreditation conditions; and
- (b) the Accredited Certificate Provider has duly applied for registration of an Energy Savings Certificate in respect of that Implementation on or before 31 January 2015.

Note: Clause 9.10 may only be used to calculate Energy Savings until 1 February 2015.

Equation 18

For each Implementation:

$$\text{Energy Savings} = \sum (\text{Deemed Equipment Energy Savings})$$

Where:

- the summation is over all items of End-User-Equipment installed at the Site in accordance with this clause 9.10; and
- *Deemed Equipment Energy Savings*, in MWh, are calculated according to **Activity Definition G1** of Schedule G for each Implementation at the Site.

10 Definitions and Interpretation

10.1 In this Rule:

“**Accuracy Factor**” has the meaning given to that term in clause 7A.10.

“**Accreditation Date**” means, with respect to a Recognised Energy Saving Activity, the date on which the Scheme Administrator approves an Accredited Certificate Provider’s application:

- (a) for accreditation with respect to that activity; or
- (b) to amend its existing accreditation to add that activity.

“**Accredited Certificate Provider**” has the same meaning it has in the Act.

“**Accredited Statistician**” means a person:

- (a) accredited by the Statistical Society of Australia Inc. at the time of carrying out the verification in accordance with clause 8.9.7(e); and
- (b) accepted by the Scheme Administrator for the purposes of this Rule.

“**Act**” means the *Electricity Supply Act 1995*.

“**Activity Definition**” means an activity as specified in a Schedule to this Rule.

“**Additional Energy Savings**” means in respect of clauses 7, 7A and 8, Energy Savings for which no Energy Savings Certificates have been created, but which arise from an Implementation in relation to which Energy Savings Certificates have been created.

“**Address**” means a street address within an ESS Jurisdiction, in a format approved by the Scheme Administrator.

“**ANZSIC**” means the Australian and New Zealand Standard Industrial Classification developed by the Australian Bureau of Statistics and Statistics New Zealand.

“**Appliance Retailer**” means a person who has sold End-User Equipment which meets the Equipment Requirements of a Recognised Energy Saving Activity set out in Schedule B, in a new condition, to a Purchaser.

“**Approved Corresponding Scheme**” has the same meaning as it has in section 127 of the Act.

“**AS/NZS**” means an Australian/New Zealand Standard as Published by SAI Global.

“**Attrition**”, in relation to clause 8.9, means the termination of the natural gas or electricity account in relation to a specific Site, for example, due to electricity customers switching retailers, relocating to a different Site, or disconnection from their electricity service.

“**Ballast EEI**” means the ballast energy efficiency index as defined in AS/NZS 4783.2 *Performance of electrical lighting equipment - Ballasts for fluorescent lamps - Energy labelling and minimum energy performance standards requirements*.

“**Baseline NABERS Rating**” has the meaning given in Step 2 of Method 4, under clause 8.8.

“**Baseline Energy Model**” is the model described in clause 7A.3.

“**BASIX**” means the NSW Building Sustainability Index established under the *Environmental Planning and Assessment Regulation 2000*.

“**BCA**” means the Building Code of Australia, forming part of the National Construction Code as updated from time to time.

“**Building Lighting**” means End-User-Equipment lighting affixed to a Commercial/Industrial premises which is classified under the BCA as Class 3, 5, 6, 7, 8, 9, or 10(b) buildings or the Common Area of a Class 2 building.

“**Business Classification**” is the primary classification of the business making use of the End-Use Service for which energy was saved, detailed in Table A18 of Schedule A.

“**Certificate Conversion Factor**” has the same meaning as in the Act.

“**CFL**” means compact fluorescent Lamp.

“**CFLi**” means a compact fluorescent Lamp with integrated ballast.

“**CFLn**” means a compact fluorescent Lamp with non-integrated ballast.

“**Coefficient of Variation**” means, for the purposes of clause 7A, the sample standard deviation expressed as a percentage of the sample mean.

“**Common Areas**” means:

- (a) for buildings owned under strata title, the common property as defined in either the *Strata Schemes (Freehold Development) Act 1973* (NSW), or *Strata Schemes (Leasehold Development) Act 1986* (NSW);
or
- (b) for buildings not owned under strata title (e.g. under company title), the non-residential property of BCA Class 2 buildings.

“**Computer Simulation**” means a method to establish an energy model that uses software to simulate energy consumption by End-User Equipment and can be tested against statistical requirements Published by the Scheme Administrator for the purposes of clause 7A of this Rule.

“**Control Gear**” means the lighting ballast, transformer or driver.

“**Control Group**” means, in relation to the Aggregated Metered Baseline sub-method set out in clause 8.9, the group of Sites selected to not be offered the Treatment.

“**Control Multiplier A**” is a factor from Table A10.4A for a control device that switches the luminaire on and off and must control a maximum of 6 luminaires (except Occupancy Sensor 1).

“**Control Multiplier B**” is a factor from Table A10.4A for a control device that reduces the luminaire’s power output and must control a maximum of 6 luminaires (except Occupancy Sensor 1). The luminaire must have at least two rated LCP modes that must not be adjusted after the Implementation.

“**Control System**” means a system for controlling the light output of a Luminaire, including:

- (a) Occupancy Sensor;
- (b) Daylight-Linked Control;

- (c) Programmable Dimming;
- (d) Manual Dimming; or
- (e) Voltage Reduction Unit.

“**Council**” means a Council as defined by the *Local Government Act 1993* or corresponding legislation in an approved corresponding scheme jurisdiction.

“**Decay Factor**” is a number between 0 and 1 which quantifies the decay of the Electricity Savings or Gas Savings due to equipment degradation over time, as determined in accordance with clauses 7 and 7A.

“**Deemed Energy Savings Method**” means the method in clause 9.

“**Default Load Utilisation Factor**” is a composite of a deemed load factor and a deemed utilisation factor for HEMs, as set out in Table A12 or Table A13 of Schedule A.

“**Distribution District**” has the same meaning as it has in the Act.

“**Distributor**” has the same meaning as it has in the Act.

“**Distribution Pipeline**” has the same meaning as it has in the *Gas Supply Act 1996*.

“**Distribution System**” has the same meaning as it has in the Act.

“**Downward Light Output**” means the luminous flux (measured in lumens) emitted in the downwards direction, equivalent to the Light Output from a Lamp or Luminaire when installed flush with a ceiling.

“**Effective Range**” means the range over which values of Independent Variables and / or Site Constants for which a Baseline Energy Model or Operating Energy model (as the case may be) is valid for the purposes of clause 7A of this Rule.

“**Electricity Network**” means all electricity Transmission Systems and Distribution Systems located in an ESS Jurisdiction.

“**Electricity Retailer**” has the same meaning as “retailer” in the *National Energy Retail Law*.

“**Electricity Savings**” means the reduction of the amount or equivalent amount of electricity consumption (in MWh) arising from the Implementation as calculated by the approved calculation method in clauses 7, 7A, 8 or 9. Electricity Savings may be negative for fuel switching activities.

“**Eligibility Requirements**” means the eligibility requirements specified in an Activity Definition in the Schedules to this Rule.

“**ELV**” means extra low voltage, not exceeding 50 volts alternating current (AC) or 120 volts ripple free direct current (DC), as defined in *AS/NZS 3000 Wiring rules*.

“**End-Use Service**” is the primary service provided by End-User Equipment, such services being as detailed in Table A17 of Schedule A.

“**End-User Equipment**” means electricity or Gas consuming equipment or both, processes, or systems, including the equipment directly consuming electricity or Gas, or both, and other equipment or products that cause, control or influence the consumption of electricity or Gas, or both, and includes (in the context of clause 8.8) a NABERS Building.

“**Energy Saver**” means the person who has the right to create Energy Savings Certificates for particular Energy Savings arising from an Implementation of a Recognised Energy Saving Activity at a Site, as defined in the relevant calculation method of this Rule.

“**Energy Savings**” means the Electricity Savings or Gas Savings or both.

“**Energy Savings Certificate**” has the same meaning as in the Act.

“**Energy Star Rating**” means an Energy Star Rating as defined in the relevant AS/NZS.

“**Equipment Requirements**” means the equipment requirements as specified in a Schedule in this Rule.

“**ESS Jurisdiction**” means the state of New South Wales, or a jurisdiction in which an Approved Corresponding Scheme is in operation in accordance with section 127 of the Act.

“**Estimate of the Mean**” means, for the purposes of clause 7A, a method to establish an energy model as described in clause 7A.2 (a)(i).

“**Gas Retailer**” has the same meaning as “retailer” in the *National Energy Retail Law*.

“**Gas Savings**” means the reduction of the amount of Gas combusted for stationary energy (in MWh) arising from the Implementation as calculated by the approved calculation method in clauses 7, 7A, 8 or 9. Gas Savings may be negative for fuel switching activities.

“**Gas**” means any fuel listed in *National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Cth) Schedule 1 Part 2—Fuel combustion—gaseous fuels* or liquefied petroleum gas.

“**GEMS Registry**” means a published registry of products registered under either Greenhouse and Energy Minimum Standards or published Minimum Energy Performance Standards (MEPS).

“**GreenPower**” means renewable energy purchased in accordance with the National GreenPower Accreditation Program Rules.

“**GST**” is the Commonwealth’s Goods and Services Tax.

“**Guide**” means a guidance document Published by the Scheme Administrator.

“**High Efficiency Motor**” (HEM) is an electric motor meeting the high efficiency requirements of AS/NZS 1359.5 (0.73 to <185kW).

“**Implementation**” means the delivery of a Recognised Energy Saving Activity at a Site, or for the purposes of clause 8.9, the delivery of a Recognised Energy Saving Activity across a Population.

“**Implementation Date**” is defined in each calculation method of this Rule.

“**Implementation Period**” means the Measurement Period for which Energy Savings Certificates may be created.

“**Implementation Requirements**” means the implementation requirements specified in an Activity Definition in the Schedules to this Rule.

“**Independent Variable**” means a parameter that varies over time, can be measured, and affects the End-User Equipment’s energy consumption for the purposes of clause 7A of this Rule.

“**Interactive Electricity Savings**” means a change in a Site’s electricity consumption due to interactions with End-User Equipment for which energy consumption is not measured for the purposes of clause 7A.

“**Interactive Energy Savings**” refers to either the Interactive Electricity Savings or the Interactive Gas Savings for the purposes of Equations 7A.2, 7A.4 or 7A.5 of this Rule.

“**Interactive Gas Savings**” means a change in a Site’s gas consumption due to interactions with End-User Equipment for which energy consumption is not measured for the purposes of clause 7A.

“**Integrated Luminaire**” means a Luminaire that integrates Lamp and Control Gear into a single item of End-User Equipment and connects to 240V supply.

“**Installation Requirements**” means the installation requirements specified in an Activity Definition in the Schedules to this Rule.

“**IPD**” means the illumination power density as defined in the BCA part J6.

“**IPMVP**” means the International Performance Measurement and Verification Protocol, published by the Efficiency Valuation Organization.

“**kV**” means a kilovolt of electrical potential.

“**kvar**” means a kilovolt-amperes reactive of reactive power.

“**kW**” means a kilowatt of electrical power.

“**kWh**” means a kilowatt-hour of electrical energy.

“**Lamp**” means an artificial source of visible light.

“**Lamp Life**” means the expected operating lifetime of a Lamp, in hours, measured in accordance with Table A9.6 of Schedule A.

“**Lamp Only**” means the replacement of an existing Lamp with a Lamp that consumes less electricity, and could include the installation or replacement of a Control System.

“**LCP**” means lamp circuit power, which is the power drawn by a single Lamp and its associated Control Gear. If the Control Gear supplies multiple Lamps, then the Control Gear losses are assigned pro rata to each Lamp, according to power drawn by each Lamp.

“**LED**” means light emitting diode.

“**Lifetime**” means the time period over which Energy Savings will be delivered and for the purposes of Schedules B, C, D, E, and G are for reference only, as the relevant time period is already taken into account in the savings factors in those Schedules.

“**Light Output**” means the luminous flux (measured in lumens) emitted by a Lamp or Luminaire.

“**Lighting for Roads and Public Spaces**” means lighting covered by *AS/NZS 1158: Lighting for roads and public spaces* or *AS/NZS 60598.2.3 Luminaires - Particular requirements - Luminaires for road and street lighting* or both, as applicable.

“**Lighting Upgrade**” means the replacement of existing lighting End-User Equipment with new lighting End-User Equipment that consumes less electricity, or the modification of existing lighting End-User Equipment resulting in a reduction in the consumption of electricity compared to what would have otherwise been consumed.

“**Low-income Energy Program**” means a New South Wales Government low income household energy initiative which has been notified to the Scheme Administrator by the New South Wales Government, and approved by the Minister for the Environment, as a Low-income Energy Program for the purposes of this Rule.

“**LUF**” means load utilisation factor.

“**Luminaire**” means the apparatus that distributes, filters or transforms the light emitted from a light source, including Lamps, Control Gear and all components necessary for fixing and protecting the Lamps, including the troffer.

“**Maintained Emergency Lighting**” means a Maintained emergency exit sign or always-on Maintained emergency luminaire as defined in *AS 2293.1: Emergency escape lighting and exit signs for buildings - System design, installation and operation*.

“**Measured Electricity Consumption**”: (a) for the purposes of clause 8.8 means the electricity consumption as determined in accordance with Method 4; and (b) for the purposes of clause 8.9 means the electricity consumption as determined in accordance with clause 8.9.3.

“**Measured Gas Consumption**”: (a) for the purposes of clause 8.8 means the Gas consumption as determined in accordance with Method 4; and (b) for the purposes of clause 8.9 means the natural gas consumption as determined in accordance with clause 8.9.3A.

“**Measurement and Verification Professional**” is defined in clause 7A.15 of this Rule.

“**Measurement Period**” means the duration of time over which measurement of energy consumption will be taken for the purposes of calculating the Energy Savings under clause 7, 7A or 8, and defined therein.

“**Metered Baseline Method**” means the method in clause 8.

“**Method 4**” means the method in clause 8.8.

“**Method 5.3**” means the method in clause 8.9.

“**MWh**” means a megawatt-hour of electrical energy.

“**NABERS**” means the National Australian Built Environment Rating System.

“**NABERS Building**” means a building that has been rated under NABERS.

“**NABERS Rating**” means a rating, expressed as a number, for a NABERS Building.

“**NABERS Reverse Calculator**” means the tool provided by the NABERS National Administrator.

“**National Energy Retail Law**” means the *National Energy Retail Law (NSW)*.

“**National Greenhouse Accounts Factors**” means the factors published by the Australian Government's Department of the Environment designed for use by companies and individuals to estimate greenhouse gas emissions.

“**National GreenPower Accreditation Program Rules**” mean the terms and conditions of participation in the National GreenPower Accreditation Program, available on the GreenPower website at <http://www.greenpower.gov.au/Business-Centre/Rules-and-Accreditation/>

“**Network Service Provider**” has the same meaning as it has in the *National Electricity (NSW) Law*.

“**New End-User Equipment**” means End-User Equipment where no End-User Equipment of the same type, function, output or service was previously in its place (but does not include additional components installed in the course of modifying existing End-User Equipment).

“**NLP**”, or Nominal Lamp Power, means the manufacturer's rated value (or tested value, as acceptable to the Scheme Administrator) for power drawn by a single Lamp.

“**Non-Habitable Building**” means a building built as a BCA Class 10a or Class 10b building.

“**Non-Routine Events**” for the purposes of clause 7A, means events which affect energy use, within the chosen Measurement Period, that are not modelled by any Independent Variables or Site Constants. They are required to be removed from the Measurement Period to enable like-for-like comparison of before and after energy savings scenarios. They are typically due to static factors that may include fixed, environmental, operational and maintenance characteristics.

“**Normal Year**” is a typical year for the operation of the End-User Equipment at the Site after the Implementation Date for the purposes of clause 7A of this Rule.

“**Number of Certificates**” means the number of Energy Savings Certificates permitted to be created by an Accredited Certificate Provider for Energy Savings calculated in accordance with clause 6.5 and the methods set out in clause 7, 7A, 8 or 9.

“**Number of Model Parameters**” of an energy model means, in respect of clause 7A, the number of parameters required to unambiguously define the functional form of the energy model. In a linear energy model, it is the number of coefficients or the number of Independent Variables and Site Constants that are used to explain energy consumption variation.

“**Operating Energy Model**” is the model established in accordance with the criteria in clause 7A.2 and described in clause 7A.4.

“**Persistence Model**” means a model that is able to forecast the continuation of Energy Savings from an Implementation over its useful life time.

“**Population**”, in relation to the Aggregated Metered Baseline sub-method, means the set of all Sites in the Control Group and Treatment Group.

“**Pre-Implementation Period**” means the Measurement Period prior to the Implementation Period. If Method 5.3 is used, the Pre-Implementation Period must cover the same period of time in a previous year as the Implementation Period.

“**Previous Rule**” means the Energy Savings Scheme Rule of 2009 as in force immediately prior to the commencement of the Energy Savings Scheme (Amendment No. 1) Rule 2016.

“Prior Accreditation” means an accreditation with respect to a Recognised Energy Saving Activity where the Accreditation Date is on or before 30 June 2014 and that accreditation has not been cancelled, and includes the conditions to that accreditation.

“Product” means a class of End-User Equipment identified uniquely by its manufacturer identifier and manufacturer’s model identifier and, in some cases, model year or year of manufacture.

“Product Stewardship Scheme” means a recycling program such as ‘Fluorocycle’ or equivalent.

“Project Impact Assessment Method” means the method in clause 7.

“Project Impact Assessment with Measurement and Verification Method” means the method in clause 7A.

“Public Lighting Inventory” means the inventory required to be maintained by the Distributor, in accordance with the NSW Public Lighting Code.

“Publish” means to document and make publicly available, on the Energy Savings Scheme website, www.ess.nsw.gov.au.

“Purchaser” for the purposes of clause 7, 7A and 9, means the person who purchases or leases the goods or services that enable the relevant Energy Savings to be made; except where

- (a) the person is an Accredited Certificate Provider and is not the owner, occupier or operator of the Site; or
- (b) the person purchases or leases the goods or services for the purpose of reselling the End-User Equipment, unless the resale will be an inclusion in a contract for the sale of land, or in a strata scheme, the sale of a lot.

Note: Housing developers that bulk purchase and install appliances in their residential developments are defined as the purchaser if the appliances will be sold in the contract for the sale of the home (as opposed to display appliances only). This applies to both the sale of land, and covers strata apartments, involving the sale of lots.

“Recognised Energy Saving Activity” has the same meaning as it has in the Act.

“Regression Analysis” means a method to establish an energy model that determines a mathematical function for approximating the relationship between Energy Consumption and Independent Variables and / or Site Constants for the purposes of clause 7A of this Rule, and includes, but is not limited to, linear regression, and mixed models.

“Regulations” means regulations made for the purposes of Part 9 of the Act.

“Residential Building” means a building classified by the BCA as a Class 1 or Class 2 building, and may include any Non-Habitable Building on the same site.

“Sampling Method” means the statistical method for conducting measurements on a subset of a population to estimate the characteristics of the entire population for the purposes of clause 7A of this Rule.

“Scheme Administrator” has the same meaning as in the Act.

“Site” means the location of the End-User Equipment affected by a Recognised Energy Saving Activity, as defined by:

- (a) an Address; or
 - (i) a unique identifier, as specified for the relevant Implementation that identifies the affected End-User Equipment; or
 - (ii) determined by a method accepted by the Scheme Administrator.

“Site Assessment” means identification of Energy Savings that may be generated at a Site using Equation 16 with reference to activities identified in Schedule D and Schedule E.

“**Site Constant**” means a parameter that varies between Sites, does not vary over time under normal operating conditions, and affects the End-User Equipment’s energy consumption for the purposes of clause 7A of this Rule.

“**Small Business Building**” means a building comprising total floor space less than 200 square metres and classified by the BCA as a Class 6 building.

“**Standard Luminaire**” in relation to table A9.4, means a Luminaire that is listed on a Distributor’s current maintained list of standard luminaires, in accordance with the NSW Public Lighting Code.

“**System U-Value**” is a measure of the thermal transmittance, in W/m²K, of a window system including glass, sash and frame, as registered under WERS.

“**Traffic Signals**” means lighting referred to in *AS 2144 Traffic signal lanterns*.

“**Transmission System**” has the same meaning as it has in the Act.

“**Treatment**” is the offering of goods and services (and any subsequent provision, engagement and promotion activities) to the Treatment Group to deliver Energy Savings.

“**Treatment Group**”, in relation to clause 8.9, means the group of Sites selected to be offered the Treatment.

“**Unbiased Selection Method**” means a randomisation technique which ensures that every Site in the Population has an equal chance of being selected into the Treatment Group. This does not require Treatment Group and Control Group to be of an equal size.

“**Uplift Energy Savings**”, in relation to clause 8.9 is the difference in energy consumption between the Control Group and Treatment Group that is estimated to have taken place due to other Recognised Energy Saving Activities or activities excluded as ineligible under clause 5.4 of this Rule.

“**VEET**” means the Victorian Energy Efficiency Target Scheme established under the *Victorian Energy Efficiency Target Act 2007 (Victoria)*.

“**WERS**” means the Window Energy Rating Scheme managed by the Australian Window Association.

10.2 Simplified outlines and notes in this Rule do not form part of this Rule.

10.3 (deleted)

10.4 The terms and expressions used in this Rule have the same meaning as they have for the purposes of Part 9 of the Act, unless otherwise defined by this clause 10.

10.5 A reference to accreditation with respect to a Recognised Energy Saving Activity means accreditation as an Accredited Certificate Provider in respect of that Recognised Energy Saving Activity.

11 Savings and Transitional Arrangements

General

11.1 An Accredited Certificate Provider may calculate Energy Savings pursuant to the Previous Rule for the calculation of Energy Savings used to create Energy Savings Certificates for which an application for registration is made after 15 April 2016 if all of the following criteria are satisfied:

- (a) the Implementation Date of the relevant Implementation is prior to 15 April 2016;
- (b) no previous applications to register Energy Saving Certificates in respect of that Implementation have been made prior to 15 April 2016; and
- (c) an application to register Energy Savings Certificates in respect of those Energy Savings is made on or before 30 June 2016.

Definitions of Energy Saver and Recognised Energy Saving Activity

- 11.2 Notwithstanding clause 5.2, an Accredited Certificate Provider may create Energy Savings Certificates in respect of the Additional Energy Savings of an Implementation for which they are the Energy Saver in accordance with their Prior Accreditation, if the initial Energy Savings Certificates for that Implementation were created on or before 30 June 2014.

(deleted)

Creation of Energy Savings Certificates

- 11.3 (deleted)

- 11.4 Clause 6.2 does not apply to Energy Savings Certificates created in respect of the Additional Energy Savings of an Implementation if the initial Energy Savings Certificates for that Implementation were created on or before 30 June 2014.

- 11.5 (deleted)

- 11.6 (deleted)

- 11.7 (deleted)

- 11.8 (deleted)

Schedule A – Default Factors and Classifications

Table A9.1: Standard Equipment Classes for Lighting Upgrades

Equipment Class	Definition
T12 linear fluorescent Lamp	A double-capped fluorescent Lamp as defined by <i>AS/NZS 4782.1 Double-capped fluorescent lamps – Performance specifications</i> with a tube diameter of 38.1mm. These are also referred to as T38
T8 linear fluorescent Lamp	A double-capped fluorescent Lamp as defined by <i>AS/NZS 4782.1 Double-capped fluorescent lamps – Performance specifications</i> with a tube diameter of 25.4mm. These are also referred to as T26
T5 linear fluorescent Lamp	A double-capped fluorescent Lamp as defined by <i>AS/NZS 4782.1 Double-capped fluorescent lamps – Performance specifications</i> with a tube diameter of 15.9mm. These are also referred to as T16
T5 or T8(T9) Circular fluorescent Lamp	A circular double-capped circular fluorescent Lamp with a typical tube diameter of 16mm or 29mm as defined by <i>AS/NZS 4782.1 Double-capped fluorescent lamps – Performance specifications</i> . These are also referred to as T9
Compact fluorescent Lamp with non-integrated ballast (CFLn)	An externally ballasted single-capped fluorescent Lamp as defined by <i>AS/NZS 60901 Single-capped fluorescent lamps-Performance specifications</i> . The Lamp may include an internal means of starting and pre-heated cathodes.
Compact fluorescent Lamp with integrated ballast (CFLi)	A Self-ballasted compact fluorescent Lamp as defined by <i>AS/NZS 4847 Self-ballasted lamps for general lighting services</i>
Tungsten halogen Lamp (240V)	A Tungsten halogen Lamp as defined in <i>AS 4934 Incandescent lamps for general lighting service</i> , with a rated voltage of 240V.
Tungsten halogen Lamp (ELV)	A Tungsten halogen Lamp as defined in <i>AS 4934 Incandescent lamps for general lighting service</i> , with a ELV rating, typically 12V. These lamps run off an Extra-low voltage lighting converter (ELC) as defined in <i>AS 4879.1</i>
Infrared coated (IRC) halogen Lamp (ELV)	A ELV Tungsten halogen Lamp as defined in <i>AS 4934</i> where the halogen globe is coated with a reflective infrared coating this improves the efficiency of the globe.
Metal halide Lamp	A discharge Lamp classified as a Metal halide Lamp as defined by <i>IEC 61167 Metal halide lamps – Performance specification</i>
Mercury vapour Lamp	A discharge Lamp classified as a High-pressure mercury vapour Lamp as defined by <i>IEC 60188 High-pressure mercury vapour lamps – Performance specifications</i>
High pressure sodium (HPS) Lamp	A discharge Lamp classified as a High pressure sodium vapour Lamp as defined by <i>IEC 60662 High-pressure sodium vapour lamps</i>
Lighting for Roads and Public Spaces or traffic signals (other than LED lighting)	Lighting for Roads and Public spaces as defined by <i>AS 1158 Lighting for roads and public spaces</i>

Table A9.2: Lamp Circuit Power (LCP) values for Standard Equipment Classes

Equipment Class	Control Gear	LCP (Watts)	Notes
T8 or T12 linear fluorescent Lamp or T8(T9) or T12 circular fluorescent Lamp	Electronic ballast, EEI = A1	NLP + 2	If EEI of Electronic ballast is not known, use EEI = A3
	Electronic ballast, EEI = A2	NLP	
	Electronic ballast, EEI = A3	NLP + 2	
	Magnetic ballast, EEI = B1	NLP + 6	If EEI of Magnetic ballast is not known use EEI = C
	Magnetic ballast, EEI = B2	NLP + 8	
	Magnetic ballast, EEI = C	NLP + 10	

	Magnetic ballast, EEI = D	$NLP + 12$	
T5 linear fluorescent Lamp or T5 circular fluorescent Lamp	Electronic ballast, EEI = A1	$1.13 \times NLP + 2.5$	If EEI of Electronic ballast is not known, use EEI = A3
	Electronic ballast, EEI = A2	$1.08 \times NLP + 1.5$	
	Electronic ballast, EEI = A3	$1.13 \times NLP + 2.5$	
Compact fluorescent Lamp with non-integrated ballast (CFLn)	Electronic ballast, EEI = A1	$NLP + 3$	If EEI of Electronic ballast is not known, use EEI = A3
	Electronic ballast, EEI = A2	$NLP + 1$	
	Electronic ballast, EEI = A3	$NLP + 3$	
	Magnetic ballast, EEI = B1	$NLP + 5$	If EEI of Magnetic ballast is not known use EEI = C
	Magnetic ballast, EEI = B2	$NLP + 7$	
	Magnetic ballast, EEI = C	$NLP + 9$	
	Magnetic ballast, EEI = D	$NLP + 11$	
Compact fluorescent Lamp with integrated ballast (CFLi)	Built In	NLP	
Tungsten halogen Lamp (240V)	Built In	NLP	
Tungsten halogen Lamp (ELV) or Infrared coated (IRC) halogen Lamp (ELV)	Magnetic transformer	$1.25 \times NLP$	Maximum NLP of removed Lamp = 35W
	Electronic transformer	$1.08 \times NLP$	
Metal halide Lamp	Magnetic ballast (reactor type)	$1.05 \times NLP + 14$	
	Magnetic ballast (constant wattage type)	$1.07 \times NLP + 22$	
	Electronic ballast	$1.10 \times NLP + 0.9$	
Mercury vapour Lamp	Magnetic ballast	$1.03 \times NLP + 11$	
High pressure sodium (HPS) Lamp	Magnetic ballast	$1.05 \times NLP + 13$	
Lighting for Roads and Public Spaces or traffic signals (other than LED lighting)	Built in or Independent	Lighting Load Table Published by AEMO or relevant regulator.	An entire traffic signal unit or Integrated Luminaire is used as the basis for calculation, rather than individual Lamps.

Table A9.3: Other Equipment Classes for Lighting Upgrades

Equipment Class	Definition
T5 adaptor kit	Any equipment that enables a T8 or T12 Luminaire to accommodate or provide physical support to a T5 Lamp or Luminaire.
Retrofit Luminaire - LED Linear Lamp	A T5, T8 or T12 Luminaire that has been retrofitted with an LED linear Lamp in place of the linear fluorescent Lamp. This cannot involve modification to the wiring of the Luminaire other than removal, replacement or modification of the starter.
LED Lamp Only – ELV	A LED Lamp that runs off an existing Extra-low voltage lighting converter (ELC) designed for retrofitting into an existing Luminaire or Lamp holder. These are typically used as a replacement for ELV Tungsten halogen Lamps
LED Lamp Only – 240V Self Ballasted	A self-ballasted LED Lamp as defined by AS/NZS IEC 62560 Self-ballasted LED lamps for general lighting services by voltage > 50 V. These Lamps are connected directly to a 240V supply.
Induction Luminaire	A gas discharge Lamp in which the power required to generate light is transferred from outside the Lamp envelope to the gas via electromagnetic induction.
LED Lamp and Driver	A LED-reflector Lamp and matching LED Driver intended as an alternative to a Mirrored Reflector Halogen Lamp
Modified Luminaire – LED Linear Lamp	A T5, T8 or T12 luminaire that has been modified for use with an LED linear Lamp. This involves modifying, removing or rendering redundant any wiring or structure of the Luminaire, beyond the replacement of a starter.
LED Luminaire – fixed type	A LED Luminaire intended for use as a fixed luminaire as defined in AS/NZS 60598.2.1 Luminaires – Particular requirements – Fixed general purpose luminaires
LED Luminaire – Linear Lamp	An LED Luminaire intended for use as an alternative to a linear fluorescent Luminaire, where the Luminaire houses a matching Linear LED tube or a linear array of integrated LEDs. Where the Luminaire uses a Linear LED tube, the Luminaire must not be compatible with a linear fluorescent Lamp.
LED Luminaire – floodlight	A LED Luminaire intended for use as a floodlight as defined in AS/NZS 60598.2.5 Luminaires – Particular requirements - Floodlights
LED Luminaire – recessed	A LED Luminaire intended for use as a recessed luminaire as defined in AS/NZS 60598.2.2 Luminaires – Particular requirements – Recessed luminaires
LED Luminaire – high/lowbay	A LED Luminaire intended for use as high-bay or low-bay lighting
LED Luminaire – streetlight	A LED Luminaire intended for use as a streetlight as defined in AS/NZS 60598.2.3 Particular requirements – Luminaires for road and street lighting
LED Luminaire – emergency lighting	A LED Luminaire intended for use as an Emergency lighting luminaire as defined in AS/NZS 60598.2.22 Particular requirements – Luminaires for emergency lighting
LED Luminaire – hospital use	A LED Luminaire intended for use in the clinical areas of a hospital or health care building as defined in AS/NZS 60958.2.25 Particular requirements – Luminaires for use in clinical areas of hospitals and health care buildings
Other Emerging Lighting Technology	Any lighting equipment not defined above.

Table A9.4: Lamp Circuit Power (LCP) values and Equipment Requirements for other Equipment Classes for Lighting Upgrades

Equipment Class	Control Gear	LCP Value	Equipment Requirement (Equipment being installed)	Equipment Requirement (Equipment being removed)
T5 Adaptor Kit	Not Applicable (ineligible)	As Published by the Scheme Administrator	Ineligible	Must demonstrate the LCP to the satisfaction of the Scheme Administrator.
Retrofit Luminaire - LED Linear Lamp	Not Applicable (ineligible)	As Published by the Scheme Administrator	Ineligible	
LED Lamp Only – ELV	Built In + Existing Magnetic Transformer	1.25 × NLP as Published by Scheme Administrator	Must meet product requirements and minimum performance specifications for Lamp Life, electro-magnetic compatibility (where applicable), lumen efficacy, power factor, LCP, and any other requirements as Published by the Scheme Administrator, as evidenced by:	
	Built In + Existing Electronic Transformer	1.08 × NLP as Published by Scheme Administrator		
LED Lamp Only – 240V Self Ballasted	Built In	As Published by the Scheme Administrator	(a) a certification scheme accepted by the Scheme Administrator, including but not limited to a Standard Luminaire list; and	
Induction Luminaire LED Lamp and Driver Modified Luminaire- LED Linear Lamp LED Luminaire – fixed type LED Luminaire – Linear Lamp LED Luminaire – floodlight LED Luminaire – recessed LED Luminaire – high/lowbay LED Luminaire – streetlight LED Luminaire – emergency lighting LED Luminaire – hospital use Other Emerging Lighting Technology	Built In or Independent		(b) test reports from an accredited laboratory, in accordance with requirements Published by the Scheme Administrator; or	
			(c) compliance with a relevant AS/NZS standard for the relevant Equipment Class recognised by the Scheme Administrator; or	
			(d) demonstrated product acceptance under schedules of the VEET scheme recognised as relevant by the Scheme Administrator including compliance with any additional Equipment Requirements Published by the Scheme Administrator.	

Table A9.5: Control gear for Lighting Upgrades

Control Gear	Definition
Magnetic ballast	A Ferromagnetic ballast as defined in <i>AS/NZS 4783 Performance of electrical lighting equipment – Ballasts for fluorescent lamps</i>
Electronic ballast	An A.C. supplied electronic ballast as defined in <i>AS/NZS 4783 Performance of electrical lighting equipment – Ballasts for fluorescent lamps</i>
Magnetic ballast (reactor type)	An electromagnetic ballast that use an inductor or autotransformer to limit the current and provide the voltage necessary to ignite the Lamp. These ballasts do not include any means of regulating the light output.
Magnetic ballast (constant wattage type)	An electromagnetic ballast that uses a combination of inductive and capacitive components to provide a regulated power output (constant wattage) to the Lamp
Magnetic transformer	A magnetic isolating transformer as defined in <i>AS/NZS 4879.1 Performance of transformers and electronic step-down convertors for ELV lamps - Test method - Energy performance.</i>
Electronic transformer	An electronic step-down convertor as defined in <i>AS/NZS 4879.1 Performance of transformers and electronic step-down convertors for ELV lamps - Test method - Energy performance.</i>

Table A9.6: Default Lamp Life for Lighting Upgrades

Type of Lamp	Lamp Life (hours)
Standard equipment classes defined in Table A9.1	As per product labelling.
Other equipment classes defined in Table A9.3	As Published by the Scheme Administrator.

Table A10.1: Asset Lifetimes for Lighting Upgrades

Activity	Asset Lifetime (years)
Replacement of: <ul style="list-style-type: none"> • Luminaire, or • Control Gear (not integrated into Lamp). 	Lighting for Roads and Public Spaces or traffic signals: 12 years All other lighting: 10 years
Replacement of: <ul style="list-style-type: none"> • Lamp Only. 	Lamp Life ÷ Annual Operating Hours (Where Lamp Life is measured in accordance with Table A9.6 and is a maximum of 30,000 hours) Maximum Asset Lifetime = 10 years for Buildings and 12 years for Lighting for Roads and Public Spaces or traffic signals
Installation of: <ul style="list-style-type: none"> • Control System as listed in Table A10.4 where the Lighting Upgrade only consists of the installation of a Control System 	Maximum Asset Lifetime = 5 years

Table A10.2: Operating Hours for Lighting Upgrades by space type

Space Type	Annual Operating Hours (hours per annum)
Auditorium, church and public hall	2,000
Board room and conference room	3,000
Carpark – general (undercover) and Car Park - entry zone (first 20 m of travel)	7,000
Carpark – general (open air)	4,500
Common rooms, spaces and corridors in a Class 2 building	7,000
Control room, switch room, and the like	Value in Table A10.3 for BCA Classification of the surrounding space
Corridors	Value in Table A10.3 for BCA Classification of the surrounding space
Courtroom	2,000
Dormitory of a Class 3 building used for sleeping only or sleeping and study	3,000

Space Type	Annual Operating Hours (hours per annum)
Entry lobby from outside the building	Value in Table A10.3 for BCA Classification of the surrounding space.
Health-care - children's ward, examination room, patient ward, all patient care areas including corridors where cyanosis lamps are used	6,000
Kitchen and food preparation area	Value in Table A10.3 for BCA Classification surrounding space
Laboratory - artificially lit to an ambient level of 400 lx or more	3,000
Library - stack and shelving area, reading room and general areas	3,000
Lounge area for communal use in a Class 3 building or Class 9c aged care building	7,000
Maintained Emergency Lighting	8,500
Museum and gallery - circulation, cleaning and service lighting	2,000
Office	3,000
Plant room	Value in Table A10.3 for BCA Classification of the surrounding space
Restaurant, café, bar, hotel lounge and a space for the serving and consumption of food or drinks	5,000
Retail space including a museum and gallery whose purpose is the sale of objects	5,000
School - general purpose learning areas and tutorial rooms	3,000
Sole-occupancy unit of a Class 3 building	3,000
Sole-occupancy unit of a Class 9c aged care building	6,000
Storage with shelving no higher than 75% of the height of the aisle lighting	5,000
Storage with shelving higher than 75% of the height of the aisle lighting	5,000
Service area, cleaner's room and the like	Value in Table A10.3 for BCA Classification of the surrounding space
Toilet, locker room, staff room, rest room and the like	Value in Table A10.3 for BCA Classification of the surrounding space
Wholesale storage and display area	5,000
Other spaces not defined above	Value in Table A10.3 for BCA Classification of space

Table A10.3: Annual Operating Hours for Lighting Upgrades by building type

Building Classification	Annual Operating Hours (hours per annum)
BCA Class 2 buildings (Common Areas)	7,000
BCA Class 3 buildings (Common Areas)	7,000
BCA Class 3 buildings (other than Common Areas)	3,000
BCA Class 5 buildings	3,000
BCA Class 6 buildings	5,000
BCA Class 7 buildings	5,000
BCA Class 7 (a) buildings (open air car parks)	4,500
BCA Class 7 (a) buildings (undercover car parks)	7,000
BCA Class 8 buildings (other than ANZSIC Division C, Manufacturing)	3,000
BCA Class 8 buildings (ANZSIC Division C, Manufacturing)	5,000
BCA Class 9a and 9c buildings	6,000
BCA Class 9b buildings	2,000
BCA Class 10b buildings	1,000
Roads and Public Spaces	4,500
Traffic Signals	8,760

Table A10.4: Control Systems and Control Multipliers for Lighting Upgrades

Control System	Definition	Control Multiplier (CM)
Occupancy Sensor	Control device that uses a motion sensor to detect the presence of people in the Space and adjusts the light output of the Luminaire. Each Occupancy Sensor must control a maximum of 6 Luminaires.	0.7
Daylight-Linked Control	Control device that uses a photoelectric cell to measure ambient daylight levels to automatically vary Luminaire light output. Each Luminaire must be located close to a significant source of daylight. (Not applicable to Carpark – general (open air) space type as referenced in Table A10.2 and BCA Class 7 (a) buildings (open air car parks) and Roads and Public Spaces building type as referenced in Table A10.3)	0.7
Programmable Dimming	Luminaire light output controlled by pre-selected light levels (scenes) which are automatically selected according to time of day, photoelectric cell and/or Occupancy Sensor. Scenes must reduce lighting power.	0.85
Manual Dimming	Control device that allows a user to control Luminaire light output using a knob, slider or other manual input mechanism or by manually selecting a pre-programmed light level (scene).	0.9
Multiple Control Systems	Programmable Dimming and Manual Dimming	0.76
	Any other combination of 2 or more control systems above.	0.6
Voltage Reduction Units (VRU)	A control device that reduces the voltage applied to the Luminaire after start-up, when used with appropriate Luminaires.	As approved by Scheme Administrator
Specialised Occupancy Sensor	An Occupancy Sensor defined in Table A10.4A	CM in Table A10.4A as applicable

Table A10.4A: Occupancy Sensor Control Multipliers for Lighting Upgrades

Control System	Definition	Control Multiplier (CM) A (See Definition in 10.1)	Control Multiplier (CM) B (See Definition in 10.1)
Occupancy Sensor 1	Control device that uses a motion sensor to detect the presence of people in the Space and adjusts the light output of the Luminaire. Each Occupancy Sensor must control a maximum of 2 Luminaires.	0.55	0.55 + 0.45 * (LCP _{low power} /LCP)
Occupancy Sensor 2 in a Carpark – general (undercover) of a class 2, 5 and 7a building.	Control device that uses a motion sensor to detect the presence of people in the parking area of a class 2, 5 or 7a building and adjusts the light output of the Luminaire.	0.3	0.3 + 0.7 * (LCP _{low power} /LCP)
Occupancy Sensor 3 in a fire stairs of a class 2, 5 and 7a building.	Control device that uses a motion sensor to detect the presence of people in the fire stairs of a class 2, 5 or 7a building and adjusts the light output of the Luminaire.	0.15	0.15 + 0.85 * (LCP _{low power} /LCP)
Occupancy Sensor 4 in a corridor of a class 2 building.	Control device that uses a motion sensor to detect the presence of people in the corridor area of a class 2 building and adjusts the light output of the Luminaire.	0.25	0.25 + 0.75 * (LCP _{low power} /LCP)

Table A10.5: Air-conditioning Multipliers for Lighting Upgrades

Air-conditioning system	Air-conditioning Multiplier (AM)
Air-conditioned	1.3
Not air-conditioned	1

Table A11: Default Efficiency Improvement (DEI) for High Efficiency Motors

Rated output (kW)	DEI by number of poles			
	2 pole	4 pole	6 pole	8 pole
0.73 to < 2.6	0.033	0.030	0.039	0.047
2.6 to < 9.2	0.021	0.020	0.024	0.027
9.2 to < 41	0.014	0.014	0.016	0.017
41 to < 100	0.010	0.009	0.010	0.010
100 to < 185	0.008	0.007	0.008	0.008

Table A12: Default Load Utilisation Factor for High Efficiency Motors – Where Business Classification and End-Use Service are known

Load Utilisation Factor	Refrigeration and freezing	Water/liquid pumping	Air compression	Air handling, fans, ventilation	Process Drives	Milling, mixing, grinding	Material handling/ conveying
Division A Agriculture, Forestry and Fishing	0.14	0.32	0.27	0.28	0.32	0.2	0.2
Division B Mining	0.09	0.36	0.32	0.41	0.32	0.32	0.28
Division C Manufacturing	0.28	0.32	0.27	0.32	0.27	0.24	0.28
Division D Electricity, Gas, Water and Waste Services	0.11	0.32	0.24	0.28	0.28	0.12	0.17
Division E Construction	0.09	0.24	0.15	0.15	0.17	0.14	0.2
Division F Wholesale Trade	0.2	0.14	0.07	0.13	0.13	0.03	0.11
Division G Retail Trade	0.17	0.09	0.07	0.13	0.13	0.03	0.07
Division H Accommodation and Food Services	0.24	0.11	0.04	0.14	0.13	0.09	0.11
Division I Transport, Postal and Warehousing	0.17	0.11	0.08	0.13	0.17	0.03	0.16
Division J Information Media and Telecommunications	0.11	0.09	0.04	0.1	0.11	0.03	0.03
Division K Financial and Insurance Services	0.09	0.05	0.04	0.06	0.06	0.03	0.03
Division L Rental, Hiring and Real Estate Services	0.09	0.05	0.04	0.06	0.06	0.03	0.03
Division M Professional, Scientific and Technical Services	0.17	0.07	0.05	0.08	0.08	0.04	0.03
Division N Administrative and Support Services	0.11	0.05	0.04	0.06	0.04	0.03	0.03
Division O Public Administration and Safety	0.09	0.05	0.04	0.06	0.04	0.03	0.03
Division P Education and Training	0.11	0.05	0.04	0.06	0.04	0.03	0.03
Division Q Health Care and Social Assistance	0.11	0.08	0.11	0.06	0.06	0.03	0.03
Division R Arts and Recreation Services	0.09	0.05	0.04	0.06	0.04	0.03	0.03
Division S Other Services	0.07	0.05	0.04	0.06	0.04	0.03	0.03

Table A13: Default Load Utilisation Factor for High Efficiency Motors – Where Business Classification or End-Use Service are not known

Rated output (kW)	LUF
0.73 to < 2.6	0.09
2.6 to < 9.2	0.10
9.2 to < 41	0.11
41 to < 100	0.13
100 to < 185	0.15

Table A14: Asset Life for High Efficiency Motors (t)

Rated output (kW) of High Efficiency Motor	t (Asset life (years))
0.73 to < 2.6	12
2.6 to < 9.2	15
9.2 to < 41	20
41 to < 100	22
100 to < 185	25

Table A16: Decay Factors for calculating future Energy Savings under the Project Impact Assessment Method (clause 7) or the Project Impact Assessment with Measurement and Verification Method (clause 7A)

Year	Decay Factor	
	Energy Savings Calculated using clause 7	Default Decay Factor for Energy Savings calculated using clause 7A
1	1.00	1.00
2	0.80	0.80
3	0.60	0.64
4	0.40	0.51
5	0.20	0.41
6	Not applicable	0.33
7	Not applicable	0.26
8	Not applicable	0.21
9	Not applicable	0.17
10	Not applicable	0.13

Table A17: End-Use Services

End-Use Services
Air heating and cooling
Air handling, fans, ventilation
Water heating
Water/liquid pumping
Refrigeration and freezing
Lighting
Cooking
Home entertainment
Computers, office equipment
Communications
Cleaning, washing
Process heat
Air compression
Process drives
Milling, mixing, grinding
Transport
People movement, lifts, escalators

End-Use Services
Materials handling, conveying
Other machines
Electricity supply
Unknown
Other End-Use Services as Published by the Scheme Administrator

Table A18: Business Classifications

Business Classification	Economic Sector
A Agriculture, Forestry and Fishing	Industrial
B Mining	Industrial
C Manufacturing	Industrial
D Electricity, Gas, Water and Waste Services	Industrial
E Construction	Industrial
F Wholesale Trade	Commercial
G Retail Trade	Commercial
H Accommodation and Food Services	Commercial
I Transport, Postal and Warehousing	Industrial
J Information Media and Telecommunications	Commercial
K Financial and Insurance Services	Commercial
L Rental, Hiring and Real Estate Services	Commercial
M Professional, Scientific and Technical Services	Commercial
N Administrative and Support Services	Commercial
O Public Administration and Safety	Commercial
P Education and Training	Commercial
Q Health Care and Social Assistance	Commercial
R Arts and Recreation Services	Commercial
S Other Services	Commercial
Residential	Residential
Unknown	Unknown

Table A19: Distribution Loss Factors (DLF) for losses between the Subtransmission network and Low Voltage connection points

Distributor	Distribution District	DLF
Endeavour Energy	Endeavour Energy	1.054
Essential Energy	Essential Energy	1.074
AusGrid	AusGrid	1.043

Table A20: Benchmark NABERS Ratings Index

NABERS Rating tool	Building category	Year of NABERS Rating End Date					
		2015	2016	2017	2018	2019	2020
Offices	Built prior to 1 November 2006	4.0	4.0	4.5	4.5	4.5	5.0
Offices	Built after 1 November 2006	5.0	5.0	5.5	5.5	5.5	6.0
Hotels	Built prior to 1 November 2006	3.0	3.5	3.5	3.5	3.5	4.0
Hotels	Built after 1 November 2006	4.0	4.5	4.5	4.5	4.5	5.0
Shopping Centres	Built prior to 1 November 2006	3.5	4.0	4.0	4.0	4.0	4.5
Shopping Centres	Built after 1 November 2006	4.5	5.0	5.0	5.0	5.0	5.5
Data Centres	Built prior to 1 November 2006	3.5	3.5	3.5	4.0	4.0	4.0
Data Centres	Built after 1 November 2006	4.5	4.5	4.5	5.0	5.0	5.0

Table A21: NABERS Annual Ratings Adjustment

NABERS Rating tool	Building category	Annual rating adjustment for historical baseline NABERS rating that is 1 year old.	Annual ratings adjustment for historical baseline NABERS rating that is 2 - 7 years old.
Offices	All	0	0.15
Hotels	All	0	0.15
Shopping	All	0	0.15
Data Centres	All	0	0.15

Table A22: (deleted)**Table A23: Accuracy Factor according to energy model type and relative precision of Energy Savings estimate**

Relative precision of Electricity Savings or Gas Savings estimate at a 90% confidence level	Accuracy Factor if an energy model developed under clause 7A.2 (a)(i) is used for the Baseline Energy Model or Operating Energy Model or both	Accuracy Factor for all other energy models
< 25%	0.9	1
25% - 50%	0.8	0.9
50% - 75%	0.7	0.8
75% - 100%	0.5	0.6
100% - 150%	0.3	0.4
150% - 200%	0.1	0.2
> 200%	0	0

Table A24: Regional Network Factors

Postcode of Site where Implementation occurred	Regional Network Factor
2311-2312	1.03
2321	1.03
2324	1.03
2329	1.03
2338-2490	1.03
2536-2537	1.03
2545-2551	1.03
2579-2599	1.03
2619-2739	1.03
2787	1.03
2791-2844	1.03
2850-2880	1.03
3585	1.03
3644	1.03
4383	1.03

Postcode of Site where Implementation occurred	Regional Network Factor
All other postcodes	1

Table A25: Metropolitan Levy Area by postcode

Metropolitan Levy Area postcodes
2000-2011
2015-2050
2052
2060-2077
2079-2090
2092-2097
2099-2122
2125-2148
2150-2168
2170-2179
2190-2200
2203-2214
2216-2234
2250-2251
2256-2265
2267
2278
2280-2287
2289-2300
2302-2308
2314-2327
2334-2335
2500
2502
2505-2506
2508
2515-2519
2525-2530
2533-2536
2538-2541
2555-2560
2563-2567
2570
2571
2575-2579
2622
2745
2747-2750
2753-2763
2765-2770
2775

Schedule B – Activity Definitions for the Sale of New Appliances (clause 9.3)

Activity Definition B1

Name of Activity

SELL A HIGH EFFICIENCY CLOTHES WASHING MACHINE

Equipment Requirements

1. The End-User Equipment must be a Clothes Washing Machine as defined in *AS/NZS 2040:2005 Performance of household electrical appliances—Clothes washing machines*.
2. The Clothes Washing Machine must be registered for energy labelling.
3. The Clothes Washing Machine must be either a top loader or a front loader.
4. The Clothes Washing Machine must have a rated capacity, load in kilograms, recorded in the GEMS Registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per washing machine sold)			
	Rated capacity > 4kg to ≤ 6kg	Rated capacity > 6kg to ≤ 7kg	Rated capacity > 7kg to ≤ 8kg	Rated capacity > 8kg
2.5	0.8	-	-	-
3.0	1.4	-	-	-
3.5	1.9	1.2	-	-
4.0	2.4	1.9	1.3	1.5
4.5	2.7	2.4	1.9	2.3
5.0	3.0	2.9	2.5	2.9
5.5	3.3	3.4	3.0	3.5
6.0	3.5	3.7	3.4	4.0

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition B2

Name of Activity
SELL A HIGH EFFICIENCY CLOTHES DRYER

Equipment Requirements

1. The End-User Equipment must be a Clothes Dryer as defined by “Rotary clothes dryer” in *AS/NZS 2442.1:1996 and 2442.2:2000 Performance of household electrical appliances—Rotary clothes dryers*
2. The Clothes Dryer must be registered for energy labelling.
3. The Clothes Dryer must not form part of a combination washer/dryer.
4. The Clothes Dryer must have a rated capacity, load in kilograms, recorded in the GEMS registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per clothes dryer sold)		
	Rated capacity < 5kg	Rated capacity ≥ 5kg to <7kg	Rated capacity ≥ 7kg
2.0	0.1	-	-
2.5	0.3	0.2	-
3.0	0.4	0.4	-
3.5	0.5	0.5	-
4.0	0.6	0.7	0.3
4.5	0.7	0.8	0.5
5.0	0.8	0.9	0.7
5.5	0.9	1.1	0.9
6.0	1.0	1.2	1.0

Lifetime (for information purposes only)
Lifetime = 10 years.

Activity Definition B3

Name of Activity

SELL A HIGH EFFICIENCY DISHWASHER

Equipment Requirements

1. The End-User Equipment must be a Dishwasher as defined in *AS/NZS 2007:2005 Performance of household electrical appliances—Dishwashers*.
2. The Dishwasher must be registered for energy labelling.
3. The Dishwasher must have a rated capacity, in number of place settings, recorded in the GEMS Registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per dishwasher sold)		
	Rated capacity < 9 place settings	Rated capacity ≥ 9 place settings to < 13 place settings	Rated capacity ≥ 13 place settings
3.5	0.4	0.9	-
4.0	0.6	1.3	-
4.5	0.8	1.6	-
5.0	1.0	1.9	0.4
5.5	1.1	2.1	0.6
6.0	1.2	2.3	0.9

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition B4

Name of Activity

SELL A HIGH EFFICIENCY 1-DOOR REFRIGERATOR

Equipment Requirements

1. The End-User Equipment must be a 1-door Refrigerator of Groups 1, 2, or 3 as defined in *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances*.
2. The Refrigerator must be registered for energy labelling.
3. The Refrigerator must have a rated capacity, volume in litres, recorded in the GEMS Registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per refrigerator sold)	
	Rated capacity < 300 litres	Rated capacity ≥ 300 litres
2.5	0.7	0.6
3.0	1.0	1.0
3.5	1.2	1.3
4.0	1.5	1.7
4.5	1.6	1.9
5.0	1.8	2.2
5.5	2.0	2.4
6.0	2.1	2.6
7.0	2.3	2.9
8.0	2.5	3.1
9.0	2.6	3.3
10.0	2.7	3.5

Lifetime (for information purposes only)

Lifetime = 12 years.

Activity Definition B5

Name of Activity

SELL A HIGH EFFICIENCY 2-DOOR REFRIGERATOR

Equipment Requirements

1. The End-User Equipment must be a 2-door Refrigerator of Groups 4, 5B, 5T or 5S as defined in *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances*.
2. The Refrigerator must be registered for energy labelling.
3. The Refrigerator must have a rated capacity, volume in litres, recorded in the GEMS Registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per refrigerator sold)		
	Rated capacity < 300 litres	Rated capacity ≥ 300 litres to < 500 litres	Rated capacity ≥ 500 litres
3.0	0.8	-	0.9
3.5	1.2	0.8	1.6
4.0	1.6	1.3	2.3
4.5	2.0	1.8	2.8
5.0	2.3	2.2	3.3
5.5	2.5	2.5	3.7
6.0	2.8	2.8	4.1
7.0	3.2	3.3	4.7
8.0	3.4	3.7	5.2
9.0	3.7	4.0	5.5
10.0	3.8	4.2	5.8

Lifetime (for information purposes only)

Lifetime = 12 years.

Activity Definition B6

Name of Activity

SELL A HIGH EFFICIENCY CHEST FREEZER OR UPRIGHT FREEZER

Equipment Requirements

1. The End-User Equipment must be a Chest Freezer or Upright Freezer of Groups 6C, 6U or 7 as defined in *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances*.
2. The Freezer must be registered for energy labelling.
3. The Freezer must have a rated capacity, volume in litres, recorded in the GEMS Registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per freezer sold)			
	Rated capacity < 150 litres	Rated capacity ≥ 150 litres to < 300 litres	Rated capacity ≥ 300 litres to < 500 litres	Rated capacity ≥ 500 litres
2.5	-	-	0.9	-
3.0	0.5	0.7	1.6	1.5
3.5	0.8	1.1	2.2	2.3
4.0	1.1	1.5	2.7	3.0
4.5	1.4	1.8	3.1	3.6
5.0	1.6	2.1	3.5	4.2
5.5	1.8	2.4	3.9	4.7
6.0	2.0	2.6	4.2	5.1
7.0	2.3	3.0	4.7	5.8
8.0	2.5	3.3	5.1	6.3
9.0	2.7	3.5	5.4	6.7
10.0	2.8	3.7	5.6	7.0

Lifetime (for information purposes only)

Lifetime = 12 years.

Activity Definition B7

Name of Activity

SELL A HIGH EFFICIENCY TELEVISION

Equipment Requirements

1. The End-User Equipment must be a Television as defined in *AS/NZS 62087.1:2010 Power consumption of audio, video and related equipment*; and *62087.2.2:2011 Power consumption of audio, video and related equipment—Minimum energy performance standards (MEPS) and energy rating label requirements for Television Sets*.
2. The Television must be registered for energy labelling.
3. The Television must have a rated capacity, diagonal screen size in centimetres, recorded in the GEMS Registry.

Equipment Electricity Savings

Energy Star Rating	Deemed Equipment Electricity Savings (MWh per television sold)		
	Rated capacity Diagonal screen size > 40cm to ≤ 80cm	Rated capacity Diagonal screen size > 80cm to ≤ 120cm	Rated capacity Diagonal screen size > 120cm
Tier 1 MEPS: 8 Tier 2 MEPS: 5	0.1	-	-
Tier 2 MEPS: 5.5	0.2	0.3	-
Tier 1 MEPS: 9 Tier 2 MEPS: 6	0.3	0.5	0.7
Tier 1 MEPS: 10 Tier 2 MEPS: 7	0.5	0.8	1.4
Tier 2 MEPS: 8	0.6	1.1	1.9
Tier 2 MEPS: 9	0.7	1.3	2.4
Tier 2 MEPS: 10	0.8	1.5	2.8

Lifetime (for information purposes only)

Lifetime = 10 years.

Schedule C – Activity Definitions for the Removal of Old Appliances (clause 9.7)

Activity Definition C1

Name of Activity

REMOVE A SPARE REFRIGERATOR OR FREEZER

Equipment Requirements

1. The Site where the End-User Equipment is located must be a Residential Building.
2. The End-User Equipment must be a Refrigerator or Freezer (or combination) that may be classified as Group 1, 2, 3, 4, 5T, 5B, 5S, 6C, 6U or 7 according to *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances*.
3. The Capacity of the Refrigerator or Freezer (as defined in AS/NZS 4474) must be 200 litres or more.
4. The Refrigerator or Freezer must be in working order.
5. There must be another Refrigerator or Freezer (as appropriate) at the Site that provides primary refrigeration or freezing services, located in, or closer to, the kitchen.
6. As a result of the activity there must be 1 fewer spare refrigerators and freezers at the Site.

Equipment Electricity Savings

Deemed Equipment Electricity Savings = 5.7 MWh per spare refrigerator or freezer removed

Lifetime (for information purposes only)

Lifetime = 7 years.

Activity Definition C2

Name of Activity

REMOVE A PRIMARY REFRIGERATOR OR FREEZER

Equipment Requirements

1. The Site where the End-User Equipment is located must be a Residential Building or Small Business Building.
2. The End-User Equipment must be a Refrigerator or Freezer (or combination) that may be classified as Group 1, 2, 3, 4, 5T, 5B, 5S, 6C, 6U or 7 according to *AS/NZS 4474.1:2007 and 4474.2:2009 Performance of household electrical appliances—Refrigerating appliances*.
3. The Capacity of the Refrigerator or Freezer (as defined in AS/NZS 4474) must be 200 litres or more.
4. The Refrigerator or Freezer must be in working order.
5. The activity may be carried out in combination with the delivery of a new refrigerator or freezer.

Equipment Electricity Savings

Deemed Equipment Electricity Savings = 2.4 MWh per primary refrigerator or freezer removed

Lifetime (for information purposes only)

Lifetime = 7 years.

Schedule D – Activity Definitions for General Activities for Home Energy Efficiency Retrofits (clause 9.8)**Activity Definition D1****Name of Activity**

REPLACE AN EXTERNAL SINGLE GLAZED WINDOW OR DOOR WITH A THERMALLY EFFICIENT WINDOW OR DOOR

Eligibility Requirements

1. The existing window must be single glazed.
2. The existing door must be a fully single glazed framed unit.
3. The existing window or door must be an external window or door of a Residential Building; or Small Business Building.

Equipment Requirements

1. The new End-User Equipment must be a window or door product (glazing and frame) rated by WERS.
2. The new End-User Equipment can be either a single glazed or double glazed or triple glazed insulating glass unit.
3. The window or door must comply with the effective version of AS 2047 and AS 1288.
4. The window or door must be rated as 6 Star by WERS in accordance with the minimum requirements for a thermally efficient window or door as detailed in Table D1.1.
5. The window or door must have a warranty of at least 5 years.

Table D1.1 – Minimum requirements for a thermally efficient window or door

Window/ door rating	Minimum WERS star rating in heating mode	Minimum WERS rating in cooling mode	Maximum System U-Value (W/m ² K)
6 Star Window or Door	6 stars	3.5 stars	2.3

Implementation Requirements

The window or door must be installed in compliance with the effective versions of AS 2047 and AS 1288.

Activity Energy Savings*Deemed Activity Electricity Savings = Electricity Savings Factor × Glazing Unit Area**Deemed Activity Gas Savings = Gas Savings Factor × Glazing Unit Area*

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh/m², are the values from Tables D1.2 and D1.3 corresponding to the type of window or door and the Site's location.
- *Glazing Unit Area*, in m², is the total window or door area of the thermally efficient window or door installed.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table D1.2 – Electricity Savings Factors for thermally efficient windows or doors (MWh per m² of window or door replaced)

Window/ Door rating	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
6 Star Window or Door	0.24	0.41	0.22	0.59

Table D1.3 – Gas Savings Factors for thermally efficient windows or doors (MWh per m² of window or door replaced)

Window/ Door rating	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
6 Star Window or Door	0.09	0.23	0.13	0.38

Lifetime (for information purposes only)

Lifetime = 30 years.

Activity Definition D2**Name of Activity****MODIFY AN EXTERNAL WINDOW OR GLAZED DOOR BY INSTALLING SECONDARY GLAZING****Eligibility Requirements**

1. The existing window must be single glazed.
2. The existing door must be a fully single glazed framed unit.
3. The existing window or door must be an external window or door of a Residential Building or Small Business Building.

Equipment Requirements

1. The End-User Equipment must be a secondary glazing product that retrofits a second glazing sheet (e.g. glass or acrylic or polycarbonate) to an existing single glazed window or door so as to form a still air gap between the specified product and the existing glazing.
2. The secondary glazing product when retrofitted must produce a window or door that is a 6 Star Window or Door in accordance with the minimum requirements for a thermally efficient window or door as detailed in Table D2.1.
3. The secondary glazing product must have a warranty of at least 5 years.

Table D2.1 – Minimum requirements for a thermally efficient window or door fitted with secondary glazing

Window/ Door rating	Minimum WERS star rating in heating mode	Minimum WERS rating in cooling mode	Maximum System U-Value (W/m ² K)
6 Star Window or Door	6 stars	3.5 stars	2.3

Implementation Requirements

The secondary glazing product must be fitted in compliance with the effective versions of AS 2047 and AS 1288 and in accordance with the manufacturer's instructions.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor × Glazing Unit Area

Deemed Activity Gas Savings = Gas Savings Factor × Glazing Unit Area

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per m², are the values from Tables D2.2 and D2.3 corresponding to the type of window or door and the Site's location.
- *Glazing Unit Area*, in m², is the total window or door area of the thermally efficient window or door installed.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table D2.2 – Electricity Savings Factors for secondary glazing products (MWh per m² of window or door modified)

Window/ Door rating	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
6 Star Window or Door	0.08	0.14	0.07	0.20

Table D2.3 – Gas Savings Factors for secondary glazing products (MWh per m² of window or door modified)

Window/ Door rating	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
6 Star Window or Door	0.03	0.08	0.04	0.13

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition D3

Name of Activity
REPLACE AN EXISTING AIR CONDITIONER WITH A HIGH EFFICIENCY AIR CONDITIONER

Eligibility Requirements
The existing air conditioner must be in working order at time of replacement.

Equipment Requirements

1. The new End-User Equipment must be an air conditioner as defined in AS/NZS 3823.2:2011.
2. The unit must be assigned a minimum star rating for cooling, as outlined in Table D3.1, and heating, if relevant under Table D3.2, under AS/NZS 3823.2:2011.
3. The replacement unit must have a cooling capacity the same as or smaller than the unit that it replaces.
4. Where the unit being replaced has a star rating, the replacement unit must be assessed under the AS/NZS 3823.2:2011 as having a higher star energy rating than the unit it replaces.
5. The new End-User Equipment must have a warranty of at least 5 years.

Implementation Requirements

1. The new air conditioner must be installed.
2. The existing air conditioner must be removed.
3. The activity must be performed or supervised by a suitably qualified licence holder in compliance with the relevant installation standards and legislation as outlined by Fair Trading.

Activity Energy Savings

Deemed Activity Electricity Savings = Cooling Capacity × Cooling Energy Savings Factor + Heating Capacity × Heating Energy Savings Factor

Where:

- *Cooling Capacity*, in kW, is the rated cooling capacity of the system from the GEMS Registry;
- *Cooling Energy Savings Factor*, in MWh/kW, is the lifetime energy savings per unit of capacity in cooling mode, as specified in Table D3.1 below, according to the type of system, climate zone, and rated cooling capacity (kW);
- *Heating Capacity*, in kW, is the rated heating capacity of the system from the GEMS Registry; and
- *Heating Energy Savings Factor*, in MWh/kW, is the lifetime energy savings per unit of capacity in heating mode as specified in Table D3.2 below according to the type of system, climate zone, and rated heating capacity (kW).

Table D3.1 – Cooling Energy Savings Factors (MWh per kW of cooling capacity replaced)

Product category	Star Rating	BCA Climate Zones 2 & 3	BCA Climate Zone 4	BCA Climate Zones 5 & 6	BCA Climate Zones 7 & 8
Non ducted split systems – all types, <4kW, all phases	4.0 Stars	0.30	0.18	0.16	0.14
	4.5 Stars	0.36	0.22	0.19	0.17
	5.0 Stars	0.42	0.25	0.22	0.19
	5.5 Stars	0.47	0.28	0.25	0.21
	6.0 Stars	0.51	0.31	0.27	0.23
	7.0 Stars	0.59	0.36	0.32	0.27
	8.0 Stars	0.65	0.40	0.35	0.30
	9.0 Stars	0.71	0.43	0.38	0.32
Non ducted split systems – all types, 4kW to <10kW all phases	3.0 Stars	0.35	0.21	0.19	0.16
	3.5 Stars	0.43	0.26	0.23	0.19
	4.0 Stars	0.49	0.30	0.26	0.22
	4.5 Stars	0.55	0.34	0.30	0.25
	5.0 Stars	0.61	0.37	0.33	0.28
	5.5 Stars	0.66	0.40	0.35	0.30

	6.0 Stars	0.70	0.43	0.38	0.32
	7.0 Stars	0.78	0.47	0.42	0.35
	8.0 Stars	0.84	0.51	0.45	0.38
	9.0 Stars	0.90	0.55	0.48	0.41
	10.0 Stars	0.95	0.58	0.51	0.43
All other product description in AS/NZS 3823.2:2011	2.5 Stars	0.36	0.22	0.19	0.16
	3.0 Stars	0.45	0.27	0.24	0.21
	3.5 Stars	0.53	0.32	0.28	0.24
	4.0 Stars	0.60	0.36	0.32	0.27
	4.5 Stars	0.66	0.40	0.35	0.30
	5.0 Stars	0.71	0.43	0.38	0.32
	5.5 Stars	0.76	0.46	0.41	0.35
	6.0 Stars	0.81	0.49	0.43	0.37
	7.0 Stars	0.88	0.54	0.47	0.40
	8.0 Stars	0.95	0.58	0.51	0.43
9.0 Stars	1.00	0.61	0.54	0.46	
10.0 Stars	1.05	0.64	0.56	0.48	

Table D3.2 – Heating Energy Savings Factors (MWh per kW of heating capacity replaced)

Product category	Star Rating	BCA Climate Zones 2 & 3	BCA Climate Zone 4	BCA Climate Zones 5 & 6	BCA Climate Zones 7 & 8
Non ducted split systems – all types, <4kW, all phases	4.0 Stars	0.10	0.45	0.16	1.37
	4.5 Stars	0.13	0.54	0.19	1.64
	5.0 Stars	0.14	0.62	0.22	1.89
	5.5 Stars	0.16	0.69	0.24	2.11
	6.0 Stars	0.18	0.76	0.27	2.31
	7.0 Stars	0.20	0.88	0.31	2.66
	8.0 Stars	0.23	0.97	0.34	2.95
	9.0 Stars	0.24	1.05	0.37	3.20
	10.0 Stars	0.26	1.12	0.39	3.41
	Non ducted split systems – all types, 4kW to <10kW all phases	3.0 Stars	0.12	0.52	0.18
3.5 Stars		0.15	0.63	0.22	1.92
4.0 Stars		0.17	0.73	0.26	2.23
4.5 Stars		0.19	0.82	0.29	2.50
5.0 Stars		0.21	0.91	0.32	2.75
5.5 Stars		0.23	0.98	0.34	2.97
6.0 Stars		0.24	1.04	0.37	3.17
7.0 Stars		0.27	1.16	0.41	3.52
8.0 Stars		0.29	1.26	0.44	3.81
9.0 Stars		0.31	1.34	0.47	4.06
All other product description in AS/NZS 3823.2:2011	2.5 Stars	0.13	0.54	0.19	1.64
	3.0 Stars	0.16	0.67	0.24	2.04
	3.5 Stars	0.18	0.79	0.28	2.39
	4.0 Stars	0.21	0.89	0.31	2.70
	4.5 Stars	0.23	0.98	0.34	2.97
	5.0 Stars	0.25	1.06	0.37	3.22
	5.5 Stars	0.26	1.13	0.40	3.44
6.0 Stars	0.28	1.20	0.42	3.64	

	7.0 Stars	0.30	1.31	0.46	3.99
	8.0 Stars	0.33	1.41	0.49	4.28
	9.0 Stars	0.35	1.49	0.52	4.53
	10.0 Stars	0.36	1.56	0.55	4.74

Lifetime (for information purposes only)
Lifetime = 10 years.

Activity Definition D4

Name of Activity
INSTALL A HIGH EFFICIENCY AIR CONDITIONER

Eligibility Requirements

1. No existing air conditioner is fixed in place that provides cooling and/or heating to the conditioned space.

Equipment Requirements

1. The new End-User Equipment must be an air conditioner as defined in AS/NZS 3823.2:2011.
2. The unit must be assigned a minimum star rating for cooling, as outlined in Table D4.1, and heating, if relevant under Table D4.2, under AS/NZS 3823.2:2011.
3. The new End-User Equipment must have a warranty of at least 5 years.

Implementation Requirements

1. The new air conditioner must be installed.
2. The activity must be performed or supervised by a suitably qualified licence holder in compliance with the relevant installation standards and legislation as outlined by Fair Trading.

Activity Energy Savings

Deemed Activity Electricity Savings = Cooling Capacity × Cooling Energy Savings Factor + Heating Capacity × Heating Energy Savings Factor

Where:

- *Cooling Capacity*, in kW, is the rated cooling capacity of the system from the GEMS Registry;
- *Cooling Energy Savings Factor*, in MWh/kW, is the lifetime energy savings per unit of capacity in cooling mode, as specified in Table D4.1 below, according to the type of system, climate zone, and rated cooling capacity (kW);
- *Heating Capacity*, in kW, is the rated heating capacity of the system from the GEMS Registry; and
- *Heating Energy Savings Factor*, in MWh/kW, is the lifetime energy savings per unit of capacity in heating mode as specified in Table D4.2 below, according to the type of system, climate zone, and rated heating capacity (kW).

Table D4.1 – Cooling Energy Savings Factors (MWh per kW of cooling capacity installed)

Product category	Star Rating	BCA Climate Zones 2 & 3	BCA Climate Zone 4	BCA Climate Zones 5 & 6	BCA Climate Zones 7 & 8
Non ducted split systems – all types, <4kW, all phases	4.0 Stars	0.08	0.05	0.04	0.04
	4.5 Stars	0.14	0.08	0.07	0.06
	5.0 Stars	0.19	0.12	0.10	0.09
	5.5 Stars	0.24	0.15	0.13	0.11
	6.0 Stars	0.29	0.17	0.15	0.13
	7.0 Stars	0.36	0.22	0.19	0.16
	8.0 Stars	0.43	0.26	0.23	0.19
	9.0 Stars	0.48	0.29	0.26	0.22
Non ducted split systems – all types, 4kW to <10kW all phases	10.0 Stars	0.53	0.32	0.28	0.24
	3.0 Stars	0.11	0.07	0.06	0.05
	3.5 Stars	0.19	0.11	0.10	0.08
	4.0 Stars	0.25	0.15	0.14	0.12
	4.5 Stars	0.31	0.19	0.17	0.14
	5.0 Stars	0.37	0.22	0.20	0.17
	5.5 Stars	0.42	0.25	0.22	0.19

	6.0 Stars	0.46	0.28	0.25	0.21
	7.0 Stars	0.54	0.33	0.29	0.25
	8.0 Stars	0.60	0.37	0.32	0.27
	9.0 Stars	0.66	0.40	0.35	0.30
	10.0 Stars	0.71	0.43	0.38	0.32
All other product description in AS/NZS 3823.2:2011	2.5 Stars	0.12	0.08	0.07	0.06
	3.0 Stars	0.21	0.13	0.11	0.10
	3.5 Stars	0.29	0.18	0.16	0.13
	4.0 Stars	0.36	0.22	0.19	0.16
	4.5 Stars	0.42	0.26	0.23	0.19
	5.0 Stars	0.47	0.29	0.25	0.22
	5.5 Stars	0.52	0.32	0.28	0.24
	6.0 Stars	0.57	0.35	0.30	0.26
	7.0 Stars	0.65	0.39	0.35	0.29
	8.0 Stars	0.71	0.43	0.38	0.32
	9.0 Stars	0.77	0.47	0.41	0.35
10.0 Stars	0.81	0.49	0.44	0.37	

Table D4.2 – Heating Energy Savings Factors (MWh per kW of heating capacity installed)

Product category	Star Rating	BCA Climate Zones 2 & 3	BCA Climate Zone 4	BCA Climate Zones 5 & 6	BCA Climate Zones 7 & 8
Non ducted split systems – all types, <4kW, all phases	4.0 Stars	0.27	1.16	0.40	0.55
	4.5 Stars	0.29	1.25	0.44	0.83
	5.0 Stars	0.31	1.33	0.46	1.07
	5.5 Stars	0.32	1.40	0.49	1.29
	6.0 Stars	0.34	1.47	0.51	1.49
	7.0 Stars	0.37	1.58	0.55	1.84
	8.0 Stars	0.39	1.68	0.59	2.13
	9.0 Stars	0.41	1.76	0.62	2.38
	10.0 Stars	0.42	1.83	0.64	2.60
Non ducted split systems – all types, 4kW to <10kW all phases	3.0 Stars	0.29	1.27	0.44	0.54
	3.5 Stars	0.32	1.38	0.48	0.89
	4.0 Stars	0.34	1.48	0.52	1.19
	4.5 Stars	0.36	1.57	0.55	1.47
	5.0 Stars	0.38	1.65	0.58	1.72
	5.5 Stars	0.40	1.73	0.60	1.94
	6.0 Stars	0.42	1.79	0.63	2.14
	7.0 Stars	0.44	1.91	0.67	2.48
	8.0 Stars	0.46	2.00	0.70	2.78
	9.0 Stars	0.48	2.09	0.73	3.03
10.0 Stars	0.50	2.16	0.76	3.24	
All other product description in AS/NZS 3823.2:2011	2.5 Stars	0.31	1.32	0.46	0.50
	3.0 Stars	0.34	1.45	0.51	0.90
	3.5 Stars	0.36	1.57	0.55	1.25
	4.0 Stars	0.39	1.67	0.58	1.56
	4.5 Stars	0.41	1.76	0.62	1.83

	5.0 Stars	0.43	1.84	0.64	2.08
	5.5 Stars	0.44	1.91	0.67	2.30
	6.0 Stars	0.46	1.98	0.69	2.50
	7.0 Stars	0.49	2.09	0.73	2.85
	8.0 Stars	0.51	2.19	0.77	3.14
	9.0 Stars	0.53	2.27	0.80	3.39
	10.0 Stars	0.54	2.34	0.82	3.61

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition D5

Name of Activity
REPLACE AN EXISTING POOL PUMP WITH A HIGH EFFICIENCY POOL PUMP

Eligibility Requirements

1. The existing pool pump must be in working order at time of replacement.

Equipment Requirements

1. The new End-User Equipment must be a product for use with a domestic pool or spa that is a single phase, single speed, dual speed, multiple speed or variable speed pump unit with an input power of not less than 300W and not more than 2500W when tested in accordance with AS 5102.1–2009.
2. The new End-User Equipment must be listed as part of a labelling scheme determined in accordance with the Equipment Energy Efficiency (E3) Committee's Voluntary Energy Rating Labelling Program for Swimming Pool Pump-units: Rules for Participation, April 2010, and achieve a minimum 5.5 star rating when determined in accordance with AS 5102.2–2009.
3. The new End-User Equipment must have a warranty of at least 5 years.

Implementation Requirements

1. The pool pump must be installed by a licensed plumber and/or electrician, where required by relevant legislation.
2. The decommissioned pool pump must be removed in accordance with relevant safety standards and legislation.

Activity Energy Savings

Deemed Activity Electricity Savings = Savings Factor

Where:

- *Savings Factor*, in MWh, is the value from Table D5.1 corresponding to the pool pump’s flow rate (in L/min) and energy star rating

Table D5.1 – Savings Factors (MWh per pool pump installed)

Energy Star Rating	Pump flow rate > 120 to < 200 L/min	Pump flow rate ≥ 200 to < 275 L/min	Pump flow rate ≥ 275 to < 350 L/min
5.5	0.7	1.1	1.4
6	1.4	2.1	2.7
7	2.4	3.6	4.7
8	3.2	4.7	6.2
9	3.7	5.6	7.4
10	4.2	6.3	8.2

Lifetime (for information purposes only)
Lifetime = 12 years.

Activity Definition D6

Name of Activity

INSTALL CEILING INSULATION IN AN UNINSULATED CEILING SPACE

Eligibility Requirements

1. There must be no existing roof or ceiling insulation present in the ceiling space.
2. For the purposes of this Activity, ceiling spaces with single sheet reflective foil insulation hung below the roofing material are deemed to be uninsulated ceiling spaces.

Equipment Requirements

1. The insulation product used must comply with the performance requirements of the effective version of AS/NZS 4859.1, as evidenced by test reports from an accredited NATA laboratory.
2. The insulation product must achieve a minimum winter R-value, when measured in accordance with the effective version of AS/NZS 4859.1, of:
 - o R3.0 if the Site is in BCA Climate Zone 2 or 3;
 - o R3.5 if the Site is in BCA Climate Zone 4, 5 or 6;
 - o R5.0 if the Site is in BCA Climate Zone 7 or 8
 after being adjusted for perimeter insulation in accordance with the effective version of AS 3999.
3. The insulation product must have a warranty of at least 25 years.
4. Foil insulation products are not eligible to be used in this activity.

Implementation Requirements

1. The insulation product used must be installed in compliance with the effective version of AS 3999 and the National Construction Code BCA Section J1.
2. Installers are required to have completed training courses CPCCOHS1001A; CPCCCM2010A; CPCCOHS2001A; CPCCPB3027A; CPCCPB3014A and other training requirements as Published by the Scheme Administrator.
3. Insulation must only be installed in ceiling spaces with an exposed roof.
4. Insulation must be installed in at least 95% of the ceiling area able to have insulation installed, after being adjusted for perimeter insulation in accordance with the effective version of AS3999.
5. Cut outs around ceiling penetrations such as downlights must be kept to the minimum permitted by regulation.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor × Insulation Area

Deemed Activity Gas Savings = Gas Savings Factor × Insulation Area

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh/m², are the values from Tables D6.1 and D6.2 corresponding to the Site's building construction and location.
- *Insulation Area*, in m², is the total ceiling area that has had insulation product installed.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table D6.1 – Electricity Savings Factors (MWh per m² of ceiling insulation installed)

Climate zone	BCA Climate Zones 2 and 3 Minimum R3.0	BCA Climate Zones 4 Minimum R3.5	BCA Climate Zones 5 and 6 Minimum R3.5	BCA Climate Zones 7 and 8 Minimum R5.0
MWh per m ²	0.16	0.29	0.17	0.47

Table D6.2 – Gas Savings Factor (MWh per m² of ceiling insulation installed)

Climate zone	BCA Climate Zones 2 and 3 Minimum R3.0	BCA Climate Zone 4 Minimum R3.5	BCA Climate Zones 5 and 6 Minimum R3.5	BCA Climate Zones 7 and 8 Minimum R5.0
MWh per m ²	0.09	0.18	0.11	0.30

Lifetime (for information purposes only)

Lifetime = 25 years.

Activity Definition D7

Name of Activity

INSTALL CEILING INSULATION IN AN UNDER-INSULATED CEILING SPACE

Eligibility Requirements

1. There must be existing roof or ceiling insulation present in the ceiling space.
2. For the purposes of this Activity, ceiling spaces with single sheet reflective foil insulation hung below the roofing material are deemed to be uninsulated ceiling spaces.
3. The R-value of existing roof or ceiling insulation must be below 3.0 when measured in accordance with the effective version of AS/NZS 4859.1.

Equipment Requirements

1. The insulation product used must comply with the performance requirements of the effective version of AS/NZS 4859.1, as evidenced by test reports from an accredited NATA laboratory.
2. The insulation product must achieve a minimum winter R-value, when measured in accordance with the effective version of AS/NZS 4859.1, of:
 - o R3.0 if the Site is in BCA Climate Zone 2 or 3;
 - o R3.5 if the Site is in BCA Climate Zone 4, 5 or 6;
 - o R5.0 if the Site is in BCA Climate Zone 7 or 8
 after being adjusted for perimeter insulation in accordance with the effective version of AS3999.
3. The insulation product must have a warranty of at least 25 years.
4. Foil insulation products are not eligible to be used in this activity.

Implementation Requirements

1. The insulation product used must be installed in compliance with the effective version of AS 3999 and the National Construction Code BCA Section J1.
2. Installers are required to have completed training courses CPCCOHS1001A; CPCCCM2010A; CPCCOHS2001A; CPCCPB3027A; CPCCPB3014A and other training requirements as Published by the Scheme Administrator.
3. Insulation must only be installed in ceiling spaces with an exposed roof.
4. Insulation must be installed in at least 95% of the ceiling area able to have insulation installed, after being adjusted for perimeter insulation in accordance with the effective version of AS3999.
5. Cut outs around ceiling penetrations such as downlights must be consistent with regulation requirements.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor × Insulation Area

Deemed Activity Gas Savings = Gas Savings Factor × Insulation Area

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh/m², are the values from Tables D7.1 and D7.2 corresponding to the Site’s building construction and location.
- *Insulation Area*, in m², is the total ceiling area that has had insulation product installed.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table D7.1 – Electricity Savings Factors (MWh per m² of ceiling insulation installed)

Climate zone	BCA Climate Zones 2 and 3 Minimum R3.0	BCA Climate Zones 4 Minimum R3.5	BCA Climate Zones 5 and 6 Minimum R3.5	BCA Climate Zones 7 and 8 Minimum R5.0
MWh per m ²	0.01	0.03	0.02	0.04

Table D7.2 – Gas Savings Factors (MWh per m² of ceiling insulation installed)

Climate zone	BCA Climate Zones 2 and 3 Minimum R3.0	BCA Climate Zones 4 Minimum R3.5	BCA Climate Zones 5 and 6 Minimum R3.5	BCA Climate Zones 7 and 8 Minimum R5.0
MWh per m ²	0.01	0.02	0.01	0.03

Lifetime (for information purposes only)

Lifetime = 25 years.

Activity Definition D8

Name of Activity
INSTALL UNDER-FLOOR INSULATION

Eligibility Requirements

1. There must be no existing ground floor insulation present.
2. The Site must have a suspended timber floor.

Equipment Requirements

1. The insulation product used must comply with the performance requirements of the effective version of AS/NZS 4859.1 and achieve a minimum winter R-value of R2.5 when measured in accordance with the effective version of AS/NZS 4859.1, as evidenced by test reports from an accredited NATA laboratory.
2. The insulation product must have a warranty of at least 25 years.
3. Foil insulation products are not eligible to be used in this activity.

Implementation Requirements

1. The Activity is restricted to ground floor suspended timber floor spaces.
2. Installers are required to have completed training courses CPCCOHS1001A; CPCCCM2010A; CPCCOHS2001A; CPCCPB3014A; and other training requirements as Published by the Scheme Administrator.
3. The insulation product must be installed in accordance with the effective version of AS 3999 and the National Construction Code BCA Section J1.
4. Insulation must be installed in at least 95% of the ground floor area able to have insulation installed.
5. Insulation may only be applied to areas that have not been previously insulated.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor × Insulation Area
Deemed Activity Gas Savings = Gas Savings Factor × Insulation Area

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh/m², are the values from Tables D8.1 and D8.2 corresponding to the Site’s building construction and location.
- *Insulation Area*, in m², is the total ground floor area that has had insulation product installed.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table D8.1 – Electricity Savings Factor (MWh per m² of under -floor insulation installed)

Climate zone	BCA Climate Zones 2 and 3 Minimum R2.5	BCA Climate Zones 4 Minimum R2.5	BCA Climate Zones 5 and 6 Minimum R2.5	BCA Climate Zones 7 and 8 Minimum R2.5
MWh per m ²	n/a	0.02	0.01	0.05

Table D8.2 – Gas Savings Factor (MWh per m² of under -floor insulation installed)

Climate zone	BCA Climate Zones 2 and 3 Minimum R2.5	BCA Climate Zones 4 Minimum R2.5	BCA Climate Zones 5 and 6 Minimum R2.5	BCA Climate Zones 7 and 8 Minimum R2.5
MWh per m ²	0.01	0.02	0.01	0.04

Lifetime (for information purposes only)
Lifetime = 25 years.

Activity Definition D9

Name of Activity INSTALL WALL INSULATION
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Eligibility Requirements
<ol style="list-style-type: none"> There must be no existing wall insulation present. For the purposes of this activity, wall cavities that contain reflective foil sarking only shall be deemed to be uninsulated spaces.

Equipment Requirements
<ol style="list-style-type: none"> The insulation product used must comply with the performance requirements of the effective version of AS/NZS 4859.1 and achieve a minimum winter R-value of 2.0 when measured in accordance with AS/NZS 4859.1, as evidenced by test reports from an accredited NATA laboratory. The insulation product used must have a warranty of at least 25 years. Foil insulation products are not eligible to be used in this activity.

Implementation Requirements
<ol style="list-style-type: none"> The insulation product used must be installed in accordance with the effective version of AS 3999 and the National Construction Code BCA Section J1. Installers are required to have completed training courses CPCCOHS1001A; CPCCCM2010A; CPCCOHS2001A; CPCCPB3014A; and other training requirements as Published by the Scheme Administrator. The insulation product must be installed in an external wall space (or part of an external wall space) but not in any common walls (as defined by the National Construction Code). Insulation must be installed in at least 95% of the wall area able to have insulation installed.

Activity Energy Savings																				
<p><i>Deemed Activity Electricity Savings = Electricity Savings Factor × Insulation Area</i> <i>Deemed Activity Gas Savings = Gas Savings Factor × Insulation Area</i></p> <p>Where:</p> <ul style="list-style-type: none"> <i>Electricity Savings Factor</i> and <i>Gas Savings Factor</i>, in MWh/m², are the values from Tables D9.1 and D9.2 corresponding to the Site’s building construction and location. <i>Insulation Area</i>, in m², is the total wall area that has had insulation product installed. Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises. <p>Table D9.1 – Electricity Savings Factor (MWh per m² of wall insulation installed)</p> <table border="1"> <thead> <tr> <th>Climate zone</th> <th>BCA Climate Zones 2 and 3 Minimum R2.0</th> <th>BCA Climate Zones 4 Minimum R2.0</th> <th>BCA Climate Zones 5 and 6 Minimum R2.0</th> <th>BCA Climate Zones 7 and 8 Minimum R2.0</th> </tr> </thead> <tbody> <tr> <td>MWh per m²</td> <td>0.05</td> <td>0.09</td> <td>0.05</td> <td>0.15</td> </tr> </tbody> </table> <p>Table D9.2 – Gas Savings Factor (MWh per m² of wall insulation installed)</p> <table border="1"> <thead> <tr> <th>Climate zone</th> <th>BCA Climate Zones 2 and 3 Minimum R2.0</th> <th>BCA Climate Zones 4 Minimum R2.0</th> <th>BCA Climate Zones 5 and 6 Minimum R2.0</th> <th>BCA Climate Zones 7 and 8 Minimum R2.0</th> </tr> </thead> <tbody> <tr> <td>MWh per m²</td> <td>0.02</td> <td>0.06</td> <td>0.03</td> <td>0.10</td> </tr> </tbody> </table>	Climate zone	BCA Climate Zones 2 and 3 Minimum R2.0	BCA Climate Zones 4 Minimum R2.0	BCA Climate Zones 5 and 6 Minimum R2.0	BCA Climate Zones 7 and 8 Minimum R2.0	MWh per m ²	0.05	0.09	0.05	0.15	Climate zone	BCA Climate Zones 2 and 3 Minimum R2.0	BCA Climate Zones 4 Minimum R2.0	BCA Climate Zones 5 and 6 Minimum R2.0	BCA Climate Zones 7 and 8 Minimum R2.0	MWh per m ²	0.02	0.06	0.03	0.10
Climate zone	BCA Climate Zones 2 and 3 Minimum R2.0	BCA Climate Zones 4 Minimum R2.0	BCA Climate Zones 5 and 6 Minimum R2.0	BCA Climate Zones 7 and 8 Minimum R2.0																
MWh per m ²	0.05	0.09	0.05	0.15																
Climate zone	BCA Climate Zones 2 and 3 Minimum R2.0	BCA Climate Zones 4 Minimum R2.0	BCA Climate Zones 5 and 6 Minimum R2.0	BCA Climate Zones 7 and 8 Minimum R2.0																
MWh per m ²	0.02	0.06	0.03	0.10																

Lifetime (for information purposes only) Lifetime = 25 years.

Activity Definition D10**Name of Activity****REPLACE AN EXISTING ELECTRIC WATER HEATER WITH A HIGH EFFICIENCY GAS FIRED WATER HEATER****Eligibility Requirements**

1. The existing electric water heater is an electric resistance storage or instantaneous water heater.
2. The existing electric water heater does not have to be in working order at time of replacement.
3. The existing electric water heater is not on a controlled load tariff (commonly known as 'off peak').

Equipment Requirements

1. The installed End-User Equipment must be a Gas fired storage or instantaneous water heater as defined in the effective version of AS4552-2005 or AS/NZS 5263.1.2:2016.
2. The installed End-User Equipment must be listed as certified in the Gas Technical Regulators Committee's (GTRC) GTRC National Certification Database and be certified for the fuel to which it will be connected.
3. The capacity of the installed End-User Equipment in Table D10.1 can be either a stored volume for a Gas fired storage water heater or a heated flow rate for a Gas fired instantaneous water heater.
4. The installed End-User Equipment must be rated at an Annual Energy Consumption of ≤ 20302 MJ (equal to 5.25 stars) in accordance with the effective version of AS4552-2005 or AS/NZS 5263.1.2:2016, unless one or more of the following conditions are met, in which case installed End-User Equipment must be rated an Annual Energy Consumption of ≤ 18279 MJ (equivalent to 6.25 stars):
 - a. the Site does not have an existing connection to a Distribution Pipeline;
 - b. it will be connected to a Gas cylinder, including but not limited to liquefied petroleum gas cylinders;
 - c. it is a Gas fired instantaneous water heater.
5. The installed End-User Equipment must have a capacity the same or smaller than the existing End-User Equipment it replaces.
6. The installed End-User Equipment must have a warranty of at least 10 years for the cylinder or tank of a Gas fired storage water heater, or the heat exchanger of a Gas fired instantaneous water heater.

Implementation Requirements

1. The existing End-User Equipment must be disconnected and removed; these tasks must be performed or supervised by a qualified person in accordance with relevant standards and legislation.
2. The End-User Equipment must be installed.
3. The activity must be performed or supervised by a qualified person in accordance with the End-User Equipment installation instructions and in compliance with plumbing, Gas work, electrical work and permanent wiring standards; and as required by other relevant legislation, local regulations, and all local codes and regulatory authority requirements.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor

Deemed Activity Gas Savings = Gas Savings Factor

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per installed End-User Equipment, are the values from Table D10.1 corresponding to the capacity and Annual Energy Consumption of the installed End-User Equipment.
- Capacity of installed End-User Equipment is available from Gas fired water heater specifications.
- Annual Energy Consumption of the installed End-User Equipment is the value listed for the equipment in the GTRC National Certification Database.

Table D10.1 – Electricity and Gas Savings Factor (MWh per installed End-User Equipment)

Capacity of installed End-User Equipment	Annual Energy Consumption (MJ)	Electricity Savings Factor (MWh)	Gas Savings Factor (MWh)
Gas fired storage water heater: <95 L Gas fired instantaneous water heater: < 18 L/min at 25°C rise	> 19797 and ≤ 20302	22.39	-25.38
	> 19291 and ≤ 19797	22.39	-24.75
	> 18785 and ≤ 19291	22.39	-24.11
	> 18279 and ≤ 18785	22.39	-23.48
	> 17774 and ≤ 18279	22.39	-22.85
	> 17268 and ≤ 17774	22.39	-22.22
	> 16762 and ≤ 17268	22.39	-21.58
	≤ 16762	22.39	-20.95
Gas fired storage water heater: 95 to 140 L Gas fired instantaneous water heater: 18 to 22 L/min at 25°C rise	> 19797 and ≤ 20302	34.09	-42.30
	> 19291 and ≤ 19797	34.09	-41.24
	> 18785 and ≤ 19291	34.09	-40.19
	> 18279 and ≤ 18785	34.09	-39.14
	> 17774 and ≤ 18279	34.09	-38.08
	> 17268 and ≤ 17774	34.09	-37.03
	> 16762 and ≤ 17268	34.09	-35.97
	≤ 16762	34.09	-34.92
Gas fired storage water heater: > 140 L Gas fired instantaneous water heater: > 22 L/min at 25°C rise	> 19797 and ≤ 20302	45.78	-59.21
	> 19291 and ≤ 19797	45.78	-57.74
	> 18785 and ≤ 19291	45.78	-56.26
	> 18279 and ≤ 18785	45.78	-54.79
	> 17774 and ≤ 18279	45.78	-53.31
	> 17268 and ≤ 17774	45.78	-51.84
	> 16762 and ≤ 17268	45.78	-50.36
	≤ 16762	45.78	-48.89

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition D11**Name of Activity****REPLACE AN EXISTING GAS FIRED WATER HEATER WITH A HIGH EFFICIENCY GAS FIRED WATER HEATER****Eligibility Requirements**

1. The existing Gas fired water heater is a Gas fired storage water heater.
2. The existing Gas fired water heater does not have to be in working order at time of replacement.

Equipment Requirements

1. The installed End-User Equipment must be a Gas fired water heater as defined in the effective version of AS4552–2005 or AS/NZS 5263.1.2:2016.
2. The installed End-User Equipment must be listed as certified in the Gas Technical Regulators Committee's (GTRC) GTRC National Certification Database and be certified for the fuel to which it will be connected.
3. The capacity of the installed End-User Equipment in Table D11.1 can be either a stored volume for a Gas fired storage water heater or a heated flow rate for a Gas fired instantaneous water heater.
4. The installed End-User Equipment must be rated at an Annual Energy Consumption of ≤ 18279 MJ (equivalent to 6.25 stars) in accordance with the effective version of AS4552–2005 or AS/NZS 5263.1.2:2016 if it is a Gas fired instantaneous water heater.
5. The installed End-User Equipment must be rated at an Annual Energy Consumption of ≤ 20302 MJ (equal to 5.25 stars) in accordance with the effective version of AS4552–2005 or AS/NZS 5263.1.2:2016 if it is a Gas fired storage water heater.
6. The installed End-User Equipment must have a capacity the same or smaller than the existing End-User Equipment it replaces.
7. The installed End-User Equipment must have a warranty of at least 10 years for the cylinder or tank of a Gas fired storage water heater, or the heat exchanger of a Gas fired instantaneous water heater.

Implementation Requirements

1. The existing End-User Equipment must be disconnected and removed; these tasks must be performed or supervised by a qualified person in accordance with relevant standards and legislation.
2. The End-User Equipment must be installed.
3. The activity must be performed or supervised by a qualified person in accordance with the End-User Equipment installation instructions and in compliance with plumbing, Gas work, electrical work and permanent wiring standards; and as required by other relevant legislation, local regulations, and all local codes and regulatory authority requirements.

Activity Energy Savings

Deemed Activity Gas Savings = Gas Savings Factor

Where:

- *Gas Savings Factor*, in MWh per installed End-User Equipment, is the value from Table D11.1 corresponding to the capacity and Annual Energy Consumption of the installed End-User Equipment.
- Capacity of installed End-User Equipment is available from Gas fired water heater specifications.
- Annual Energy Consumption of the installed End-User Equipment is the value listed for the equipment in the GTRC National Certification Database.

Table D11.1 – Gas Savings Factor (MWh per installed End-User Equipment)

Capacity of installed End-User Equipment	Annual Energy Consumption (MJ)	Gas Savings Factor (MWh)
Gas fired storage water heater: <95 L Gas fired instantaneous water heater: < 18 L/min at 25°C rise	> 19797 and ≤ 20302	4.43
	> 19291 and ≤ 19797	5.06
	> 18785 and ≤ 19291	5.69
	> 18279 and ≤ 18785	6.32
	> 17774 and ≤ 18279	6.95
	> 17268 and ≤ 17774	7.59
	> 16762 and ≤ 17268	8.22
Gas fired storage water heater: 95 to 140 L Gas fired instantaneous water heater: 18 to 22 L/min at 25°C rise	≤ 16762	8.85
	> 19797 and ≤ 20302	7.38
	> 19291 and ≤ 19797	8.43
	> 18785 and ≤ 19291	9.48
	> 18279 and ≤ 18785	10.54
	> 17774 and ≤ 18279	11.59
	> 17268 and ≤ 17774	12.64
Gas fired storage water heater: > 140 L Gas fired instantaneous water heater: > 22 L/min at 25°C rise	> 16762 and ≤ 17268	13.70
	≤ 16762	14.75
	> 19797 and ≤ 20302	10.33
	> 19291 and ≤ 19797	11.80
	> 18785 and ≤ 19291	13.28
	> 18279 and ≤ 18785	14.75
	> 17774 and ≤ 18279	16.23
	> 17268 and ≤ 17774	17.70
	> 16762 and ≤ 17268	19.18
	≤ 16762	20.65

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition D12

Name of Activity

INSTALL A HIGH EFFICIENCY GAS SPACE HEATER OR REPLACE AN EXISTING GAS SPACE HEATER WITH A HIGH EFFICIENCY GAS SPACE HEATER

Eligibility Requirements

1. This activity must be an installation of a high efficiency Gas space heater or a replacement of an existing Gas space heater with a high efficiency Gas space heater.

Equipment Requirements

1. The installed End-User Equipment must be a Gas space heating appliance as defined in the effective version of AS4553–2008 or AS/NZS 5263.1.3:2016.
2. The installed End-User Equipment must be rated at a minimum of 5 stars in accordance with AS4553–2008, listed in the Directory of Australian Gas Association (AGA) Certified Products and be certified for the fuel to which it will be connected.
3. The installed End-User Equipment can be a Flued Radiant/Convection Heater, a Balanced Flue Convection Heater or a Wall Furnace, as listed in the Directory of AGA Certified Products.
4. The installed End-User Equipment must have a capacity the same or smaller than the existing End-User Equipment it replaces, in the case of replacement of a Gas space heater.
5. The installed End-User Equipment must have a warranty of at least 10 years for the heat exchanger.

Implementation Requirements

1. If there is any existing End-User Equipment, it must be disconnected and removed; these tasks must be performed or supervised by a qualified person in accordance with relevant standards and legislation.
2. The End-User Equipment must be installed.
3. The activity must be performed or supervised by a qualified person in accordance with the End-User Equipment installation instructions and in compliance with Gas work, electrical work and permanent wiring standards; and as required by other relevant legislation, local regulations, and all local codes and regulatory authority requirements.

Activity Energy Savings

Deemed Activity Gas Savings = Gas Savings Factor

Where:

- *Gas Savings Factor*, in MWh per installed End-User Equipment, is the value from Table D12.1 corresponding to the installed End-User Equipment Annual Energy Consumption and Star Rating; as well as the BCA climate zone where the Site is situated.
- Annual Energy Consumption and Star Rating of the installed End-User Equipment are the values listed for the equipment in the most recent version of Directory of AGA Certified Products.
- In cases where the Star Rating for the installed End-User Equipment is between increments, or above 5.50, it is rounded down to the closest Star Rating.

Table D12.1 – Gas Savings Factor (MWh per installed End-User Equipment)

Annual Energy Consumption (MJ/y)	Star Rating	BCA Climate Zones 2 & 3	BCA Climate Zone 4	BCA Climate Zones 5 & 6	BCA Climate Zones 7 & 8
<9000	5.00 Stars	0.19	0.52	0.28	0.95
	5.25 Stars	0.20	0.57	0.31	1.05
	5.50 Stars	0.21	0.63	0.33	1.16
9000 to 13000	5.00 Stars	0.39	1.45	0.68	2.83
	5.25 Stars	0.42	1.62	0.75	3.18
	5.50 Stars	0.46	1.79	0.82	3.52
>13000	5.00 Stars	0.48	1.90	0.87	3.75
	5.25 Stars	0.53	2.13	0.97	4.22
	5.50 Stars	0.58	2.36	1.07	4.68

Lifetime (for information purposes only)

Lifetime = 10 years.

Schedule E – Activity Definitions for Low Cost Activities for Home Energy Efficiency Retrofits (clause 9.8)

Activity Definition E1

Name of Activity
REPLACE HALOGEN DOWNLIGHT WITH AN LED LUMINAIRE AND/OR LAMP

Eligibility Requirements

1. The existing Lamp must be a Tungsten halogen Lamp (240V), Tungsten halogen Lamp (ELV), or Infrared coated (IRC) halogen Lamp (ELV) as defined in Table A9.1 of this Rule.
2. The existing Lamp must be a multifaceted reflector Lamp.
3. The existing Lamp must be rated at either 35W or 50W.
4. The existing Lamp and Luminaire must be in working order.

Equipment Requirements

1. The new End-User Equipment must be a LED Lamp only – ELV, LED Lamp and Driver, LED Luminaire-recessed, or an LED Lamp Only – 240V Self Ballasted, as defined in Table A9.1 or Table A9.3 of Schedule A.
2. Any End-User Equipment classified under Table A9.3 must meet the requirements of Table A9.4 of Schedule A.
3. The new End-User Equipment must have an initial Downward Light Output of ≥ 462 lumens.
4. The new End-User Equipment must have a beam angle consistent with the original Lamp being replaced.
5. The new End-User Equipment must be compatible with the existing Electronic Transformer.
6. The new End-User Equipment must be compatible with any dimmer installed on the same circuit as the new End-User Equipment.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician.
2. ELV halogen Control Gear must be removed or replaced when the Lamp uses a Magnetic Transformer.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor

Where:

- *Electricity Savings Factor*, in MWh, is the value from Table E1.1 corresponding to the existing Lamp or Luminaire where the Lamp Circuit Power of the replacement Lamp being installed (in Watts); and
- Lamp Circuit Power is the Lamp Circuit Power of the replacement Lamp being installed (in Watts) and is measured in accordance with Table A9.4 of Schedule A.

Table E1.1 Electricity Savings Factor (MWh per Lamp replaced)

Existing Lamp and/or Luminaire	New Lamp and/or Luminaire	New Lamp Circuit Power (Watts)		
		≤5 W	≤10 W	≤15 W
Tungsten halogen Lamp (ELV) with Electronic Transformer or Infrared coated (IRC) halogen Lamp (ELV) with Electronic Transformer.	LED Lamp and Driver	0.49	0.42	0.34
	LED Lamp only - ELV	0.44	0.36	0.28
Tungsten halogen Lamp (ELV) with Magnetic Transformer or Infrared coated (IRC) halogen Lamp (ELV) with Magnetic Transformer.	LED Lamp and Driver	0.58	0.51	0.43
Luminaire with Tungsten halogen Lamp (ELV) and Electronic Transformer, or Luminaire with Infrared coated (IRC) halogen Lamp (ELV) and Electronic Transformer.	LED Luminaire - recessed	0.49	0.42	0.34
	LED Lamp only - ELV	0.44	0.36	0.28

Luminaire with Tungsten halogen Lamp (ELV) and Magnetic Transformer, or Luminaire with Infrared coated (IRC) halogen Lamp (ELV) and Magnetic Transformer.	LED Luminaire – recessed	0.58	0.51	0.43
Tungsten halogen Lamp (240V)	LED Lamp only – 240V Self Ballasted	0.68	0.60	0.53
	LED Lamp and Driver			
Tungsten halogen Lamp (240V) and Luminaire	LED Luminaire – recessed	0.68	0.60	0.53

Lifetime (for information purposes only)
Lifetime = 15 years

Activity Definition E2

Name of Activity
REPLACE A LINEAR HALOGEN FLOODLIGHT WITH A HIGH EFFICIENCY LAMP

Eligibility Requirements

1. The existing Lamp must be a linear halogen floodlight.
2. The existing Lamp must be rated at more than 100W.
3. Existing equipment must be in working order at time of replacement.

Equipment Requirements

1. The new End-User Equipment must be a CFLi or an LED Luminaire – Floodlight, as defined in Table A9.1 or Table A9.3 of Schedule A.
2. Any End-User Equipment classified under Table A9.3 must meet the requirements of Table A9.4 of Schedule A.
3. CFLs must have a Lamp Life of at least 10,000 hours when measured in accordance with Table A9.6 of Schedule A.
4. The new End-User Equipment must have a beam angle consistent with that of the original Lamp being replaced.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician.

Activity Energy Savings
Deemed Activity Electricity Savings = Electricity Savings Factor

Where:

- *Electricity Savings Factor*, in MWh, is the value from Table E2.1 corresponding to the Lamp Circuit Power of the existing Lamp and the replacement Lamp being installed (in Watts); and
- *Lamp Circuit Power* is measured in Accordance with Table A9.2 of Schedule A.

Table E2.1 – Electricity Savings Factor (MWh per linear halogen floodlight replaced)

Lamp Circuit Power of existing Lamp	New End-User Equipment	Initial Light Output of new End-User Equipment (lm)	Lamp Circuit Power of replacement Lamp (W)				
			≤30W	≤45W	≤60W	≤90W	≤150W
100W ≤ LCP < 150W	LED Luminaire – Floodlight or CFLi	≥1,500	0.33				
150W ≤ LCP < 200W	LED Luminaire – Floodlight or CFLi	≥2,500	0.55	0.46			
200W ≤ LCP < 300W	LED Luminaire – Floodlight or CFLi	≥3,500		0.68	0.61		
300W ≤ LCP < 500W	LED Luminaire – Floodlight or CFLi	≥5,700			1.05	0.88	
500W ≤ LCP	LED Luminaire – Floodlight or CFLi	≥10,000				1.75	1.40

Lifetime (for information purposes only)
Lifetime = 10 years.

Activity Definition E3

Name of Activity
REPLACE PARABOLIC ALUMINISED REFLECTOR (PAR) LAMP WITH EFFICIENT LUMINAIRE AND/OR LAMP

Eligibility Requirements

1. The existing Lamp must be a 240V parabolic aluminised reflector (PAR) Lamp.
2. The existing Lamp must be rated at between 80W and 160W.
3. Existing lighting equipment must be in working order at time of replacement.

Equipment Requirements

1. The new End-User Equipment must be a LED Lamp Only – 240V Self Ballasted, CFLi or LED Luminaire – Floodlight as defined in Table A.9.1 or Table A9.3
2. Any End-User Equipment classified under Table A9.3 must meet the requirements of Table A9.4 of Schedule A.
3. CFL Lamps must have a Lamp Life of at least 10,000 hours when measured in accordance with Table A9.6 of Schedule A.
4. The new End-User Equipment must have a beam angle consistent with that of the original Lamp being replaced.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician.

Activity Energy Savings
Deemed Activity Electricity Savings = Electricity Savings Factor

Where:

- *Electricity Savings Factor*, in MWh, is the value from Table E3.1 corresponding to the lighting retrofit activity and the Lamp Circuit Power of the replacement lamp being installed (in Watts); and
- Lamp Circuit Power is measured in accordance with Table A9.2 of Schedule A.

Table E3.1 Electricity Savings Factor (MWh per PAR lamp replaced)

LCP of Existing Lamp	Initial Light output of new End-User Equipment	Lamp Circuit Power of the replacement lamp (Watts)			
		≤15 W	≤25 W	≤30 W	≤40 W
80W ≤ LCP < 100W	≥ 1200 lm	0.60	-	-	-
100W ≤ LCP < 120W	≥ 1500 lm	0.80	0.75	-	-
120W ≤ LCP < 140W	≥ 1900 lm	1.00	0.95	0.90	-
140W ≤ LCP < 160W	≥ 2300 lm	1.20	1.15	1.10	1.00

Lifetime (for information purposes only)
Lifetime = 10 years.

Activity Definition E4

Name of Activity

REPLACE A T8 OR T12 LUMINAIRE WITH A T5 LUMINAIRE

Eligibility Requirements

1. Must be an existing 2 foot, 3 foot, 4 foot, or 5 foot T8 or T12 Luminaire.
2. Existing lighting equipment must be in working order at time of replacement.

Equipment Requirements

1. The new End-User equipment must be a T5 linear fluorescent Luminaire.
2. The new End-User Equipment must not be a T5 Adaptor kit.
3. The new Luminaire must have a length consistent with the existing Luminaire.
4. Lamp Life must be at least 20,000 hours when measured in accordance with Table A9.6.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor

Where:

- *Electricity Savings Factor*, in MWh, is the value from Table E4.1 corresponding to the Lamp size.

Table E4.1 – Electricity Savings Factor (MWh per T8 or T12 Luminaire replaced)

Luminaire and Lamp size	Electricity Savings Factor (MWh)
2 foot (600mm)	0.10
3 foot (900mm)	0.12
4-foot (1200mm)	0.14
5-foot (1500mm)	0.16

Lifetime (for information purposes only)

Lifetime = 10 years.

Activity Definition E5

Name of Activity

REPLACE A T8 OR T12 LUMINAIRE WITH A LED LUMINAIRE

Eligibility Requirements

1. Must be an existing 2 foot, 3 foot, 4 foot or 5 foot T8 or T12 Luminaire.
2. Existing lighting equipment must be in working order at time of replacement.

Equipment Requirements

1. The new End-User Equipment must be a LED Luminaire – Linear Lamp as defined in Table A9.3.
2. The new End-User Equipment must not be a Retrofit Luminaire – LED Linear Lamp or Modified Luminaire – LED Linear Lamp as defined in Table A9.3.
3. Any End-User Equipment classified under Table A9.3 must meet the requirements of Table A9.4 of Schedule A.
4. Lamp Life must be at least 20,000 hours when measured in accordance with Table A9.6.
5. The new End-User Equipment must be compatible with any dimmer installed on the same circuit as the new End-User Equipment.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor

Where:

- *Electricity Savings Factor*, in MWh, is the value from Table E5.1 below corresponding to the Lamp Circuit Power (LCP) specified in Table A9.2.

Table E5.1 – Electricity Savings Factor (MWh per T8 or T12 Luminaire replaced)

Lamp type	Initial Light Output of new End-User Equipment (lm)	Lamp Circuit Power of the replacement lamp (Watts)				
		≤10W	≤20W	≤30W	≤ 40W	≤50W
2 foot (600mm)	≥ 1000	0.24	0.09	-	-	-
3 foot (900mm)	≥ 1600	-	0.27	0.12	-	-
4 foot (1200mm)	≥ 2500	-	-	0.21	0.06	-
5 foot (1500mm)	≥ 3200	-	-	-	0.39	0.24

Lifetime (for information purposes only)

Lifetime = 15 years.

Activity Definition E6

Name of Activity

REPLACE AN EXISTING SHOWERHEAD WITH AN ULTRA LOW FLOW SHOWERHEAD

Eligibility Requirements

1. The hot water service supplying the shower must be provided by an electric resistance water heater, an electrically boosted solar water heater or an electric heat pump water heater (for electricity savings); or by a Gas fired storage water heater, Gas fired instantaneous water heater or a Gas boosted solar water heater (for Gas savings).
2. There must be an existing showerhead on each shower.

Equipment Requirements

1. The End-User Equipment must be a showerhead as defined in the effective version of *AS/NZS 3662– Performance of showers for bathing*.
2. The showerhead must be assigned a minimum 3 Star WELS Rating with a nominal flow rate of ≤ 6 litres/minute when tested according to *AS/NZS 6400:2005 – Water efficient products*.
3. The showerhead must have a warranty of at least 2 years.

Implementation Requirements

1. The replacement of the showerhead must be performed or supervised by a licensed plumber in accordance with the Plumbing Code of Australia.
2. A maximum of one showerhead per shower can be replaced.
3. The showerhead must be compatible with the installed water heating system.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor

Deemed Activity Gas Savings = Gas Savings Factor

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per showerhead, are the values from Tables E6.1 and E6.2 corresponding to the type of water heating system servicing the shower.
- The Gas or Electricity Savings Factor applied must match the type of water heating system.
- In the case where showerhead replacement occurs in conjunction with a water heating system replacement, the Gas or Electricity Savings Factor applied must match the new installed water heating system.

Table E6.1 – Electricity Savings Factor (MWh per showerhead replaced)

Electric water heating system	Electricity Savings Factor (MWh)
Electric resistance water heater	1.9
Electrically boosted solar water heater	1.1
Electric heat pump water heater	1.1

Table E6.2 – Gas Savings Factor (MWh per showerhead replaced)

Gas fired water heating system	Gas Savings Factor (MWh)
Gas fired storage water heater	3.4
Gas fired instantaneous water heater	3.1
Gas boosted solar water heater	1.2

Lifetime (for information purposes only)

Lifetime = 7 years.

Activity Definition E7

Name of Activity

MODIFY AN EXTERNAL DOOR WITH DRAUGHT-PROOFING

Eligibility Requirements

1. Doors to be draught-proofed must have gaps between the door and frame and/or threshold that permit the infiltration of air into or out of the Site.
2. Only external doors may be draught-proofed.

Equipment Requirements

1. The equipment to be applied must be a retail door bottom sealing product or door perimeter weather-stripping product or a combination of the two.
2. The product must be fit for purpose.
3. The product’s sealing surface must be made of a durable compressible material such as foam, polypropylene pile, flexible plastic, rubber compressible strip, fibrous seal or similar.
4. The product must not impair the proper operation of the door.
5. The product must have a warranty of at least 2 years.

Implementation Requirements

1. The product must be applied to a door bottom seal or a set of door jamb and head seals or a combination of both.
2. The product, once applied, must effectively restrict the airflow into or out of the Site around the perimeter of the door.
3. The product must be installed in strict accordance with the manufacturer’s instructions.
4. All external doors (excluding sliding doors) at the Site that meet the Eligibility Requirements must be draught-proofed.
5. The product must be installed in accordance with the National Construction Code BCA Section J3 and any relevant AS/NZS as required by the Scheme Administrator.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor
Deemed Activity Gas Savings = Gas Savings Factor

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per door, are the values from Tables E7.1 and E7.2 corresponding to the type of building construction and the BCA Climate Zone of the Site.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table E7.1 – Electricity Savings Factor (MWh per door modified)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per door	0.14	0.12	0.09	0.22

Table E7.2 – Gas Savings Factor (MWh per door modified)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per door	0.04	0.11	0.06	0.16

Lifetime (for information purposes only)

Lifetime = 5 years.

Activity Definition E8**Name of Activity****MODIFY AN EXTERNAL WINDOW WITH DRAUGHT-PROOFING****Eligibility Requirements**

1. Windows to be draught-proofed must present with gaps between the sash and frame that permit the infiltration of air into or out of the Site.
2. Only external windows may be draught-proofed.

Equipment Requirements

1. The equipment to be applied must be a retail window sealing or weather stripping product or a combination of the two.
2. The product must be fit for purpose.
3. The product's sealing surface must be made of a durable compressible material such as foam, polypropylene pile, flexible plastic, rubber compressible strip, fibrous seal or similar.
4. The product must not impair the proper operation of the window.
5. The product must have a warranty of at least 2 years.

Implementation Requirements

1. The product must be applied to the perimeter of the window sash.
2. The product, once applied, must effectively restrict the airflow into or out of the Site around the perimeter of the window.
3. The product must be installed in strict accordance with the manufacturer's instructions.
4. All external windows at the Site that meet the Eligibility Requirements must be draught-proofed.
5. The draught-proofing product (or products) must be installed in accordance with the National Construction Code BCA Section J3 and any relevant AS/NZS as required by the Scheme Administrator.

Activity Energy Savings

$$\text{Deemed Activity Electricity Savings} = \text{Electricity Savings Factor} \times \text{Length}$$

$$\text{Deemed Activity Gas Savings} = \text{Gas Savings Factor} \times \text{Length}$$

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per metre, are the values from Tables E8.1 and E8.2 corresponding to the type of building construction and the BCA Climate Zone of the Site.
- *Length*, in metres, is the length of window perimeter to which the product has been applied.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table E8.1 – Electricity Savings Factor (MWh per metre of window perimeter modified)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per metre of window perimeter	0.02	0.03	0.02	0.05

Table E8.2 – Gas Savings Factor (MWh per metre of window perimeter modified)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per metre of window perimeter	0.01	0.02	0.01	0.03

Lifetime (for information purposes only)

Lifetime = 5 years.

Activity Definition E9

Name of Activity
MODIFY A FIREPLACE CHIMNEY BY SEALING WITH A DAMPER

Eligibility Requirements

1. The fireplace that the damper is to be installed in must be within a Residential Building or Small Business Building.
2. The fireplace must be an open fireplace; and not have an existing damper.

Equipment Requirements

1. The damper must be fit for purpose and capable of effectively sealing the flue or chimney of an open fireplace.
2. If the damper is designed to be used in an operable fireplace then it must be of a durable construction such that its operation is not adversely affected by the heat of a fire and when open it must not adversely affect the operation of the fireplace, in particular the chimney/flue’s capacity to “draw” smoke out of the firebox.
3. The chimney damper must, to the satisfaction of the Scheme Administrator, be a durable product that will deliver long-lasting energy savings.
4. The damper installed must have a warranty of at least 5 years

Implementation Requirements

1. The damper must be installed in accordance with the manufacturer’s instructions.
2. If the damper is not designed to be used in an operable fireplace (i.e. permanent sealing) the fireplace must be sealed such that access to the combustion chamber is also permanently sealed or if the firebox is not to be sealed then the fuel burning device must be clearly tagged as having been sealed.
3. If the damper is designed to be used in an operable fireplace it must be installed in a manner that ensures that the safe operation of the fireplace is not compromised.
4. Works must be carried out in accordance with the National Construction Code BCA Section J3 and any relevant AS/NZS as required by the Scheme Administrator.
5. All fireplaces at the Site that meet the Eligibility Requirements must be sealed.

Activity Energy Savings

Deemed Activity Electricity Savings = Electricity Savings Factor
Deemed Activity Gas Savings = Gas Savings Factor

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per fireplace, are the values from Tables E9.1 and E9.2 corresponding to the type of building construction and the BCA Climate Zone of the Site.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises.

Table E9.1 – Electricity Savings Factor (MWh per fireplace modified)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per fireplace	1.4	2.4	1.3	2.5

Table E9.2 – Gas Savings Factor (MWh per fireplace modified)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per fireplace	0.7	1.7	0.9	1.7

Lifetime (for information purposes only)
Lifetime = 5 years.

Activity Definition E10

Name of Activity
MODIFY A SINGLE GLAZED WINDOW OR DOOR BY APPLYING A FILM

Eligibility Requirements

1. The Site must be a Residential Building or Small Business Building.
2. The window must be an external window.
3. The existing door must be external and a fully single glazed framed unit.
4. The window or door must not face south (between 135° and 225° of true north).
5. The window or door must not be shaded by any existing external shading device (including, but not limited to, window or door film, roller blinds, awnings or louvres, but excluding roof eaves).

Equipment Requirements

1. The End-User Equipment to be applied to the window or door must be a film product certified under WERS for Film.
2. The film product must, as registered with WERS, when applied to a single clear glazed window or door that is set within a standard aluminium frame deliver a thermal efficiency equivalent to a minimum 3 star WERS rating in cooling mode.
3. The product must have a warranty of at least 10 years.

Implementation Requirements

1. The window or door insulating film must be applied according to the manufacturer’s instructions.
2. The window or door film must be applied by a person holding a WERS for Film licence or equivalent accreditation as accepted by the Scheme Administrator.

Activity Energy Savings
Deemed Activity Electricity Savings = Electricity Savings Factor × Area
Deemed Activity Gas Savings = Gas Savings Factor × Area

Where:

- *Electricity Savings Factor* and *Gas Savings Factor*, in MWh per m², are the values from Tables E10.1 and E10.2 corresponding to the BCA Climate Zone of the Site.
- *Area*, in m², is the area of window or door glazing to which insulating film is applied.
- Implementation of the Activity allows both Electricity and Gas Savings Factors to be applied, regardless of fuel used for heating or cooling at the premises. However, Gas Savings Factors equal zero (0.00).

Table E10.1 – Electricity Savings Factor (MWh per m² of window or door film applied)

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per m ²	0.10	0.10	0.06	0.04

Table E10.2 – Gas Savings Factor (MWh per m² of window or door film applied). Note: Figures are all zero (0.00).

Climate zone	BCA Climate Zones 2 and 3	BCA Climate Zones 4	BCA Climate Zones 5 and 6	BCA Climate Zones 7 and 8
MWh per m ²	0.00	0.00	0.00	0.00

Lifetime (for information purposes only)
Lifetime = 10 years.

Activity Definition E11

Name of Activity

REPLACE AN EDISON SCREW OR BAYONET LAMP WITH AN LED LAMP FOR GENERAL LIGHTING PURPOSES

Eligibility Requirements

1. The existing Lamp must be a 240V fixed ceiling or wall mounted luminaire fixture.
2. The existing Lamp must be an Edison screw or Bayonet Lamp.
3. The existing Lamp must be an Incandescent, halogen or CFL Lamp.
4. The existing Lamp and Luminaire must be in working order.
5. Must be a Lamp only replacement.

Equipment Requirements

1. The new End-User Equipment must be a 240V Edison screw or Bayonet self-ballasted LED Lamp.
2. Any End-User Equipment classified under Table A9.3 must meet the requirements of Table A9.4 of Schedule A.
3. The new End-User Equipment must be compatible with any dimmer installed on the same circuit as the new End-User Equipment.
4. The new End-User Equipment must have a lumen output the same or higher than the replaced Lamp.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician

Activity Energy Savings

$$\text{Deemed Activity Electricity Savings} = \text{LCP of new Lamp} \times (\text{lumen efficacy of new Lamp} / 34.7 - 1) \times 840 \times 10 / 10^6$$

Where:

- *Lamp Circuit Power*, is the wattage of the replacement Lamp being installed and is measured in accordance with Table A9.4 of Schedule A.
- *Lumen efficacy of the new Lamp* is the rated lumens divided by the Lamp Circuit Power of the new Lamp being installed.

Lifetime (for information purposes only)

Lifetime = 10 years.

Schedule F – Activity Definitions for Installation of High Efficiency Appliances for Businesses (clause 9.9)

Activity Definition F1

Name of Activity
INSTALL A NEW HIGH EFFICIENCY REFRIGERATED DISPLAY CABINET

Equipment Requirements

- The End-User Equipment must be a Refrigerated Display Cabinet (RDC) rated ‘high efficiency’ within the meaning of AS1731.14-2003 when tested in accordance with AS 1731.9-2003 and AS 1731.12-2003.
- The RDC must be a registered product under GEMS and comply with the Greenhouse and Energy Minimum Standards (Refrigerated Display Cabinets) Determination 2012.

Installation Requirements

- The RDC must be installed.

Equipment Energy Savings

Deemed Equipment Electricity Savings = (Baseline Efficiency × TDA – TEC) x 365.24 × Lifetime / 1000

Where:

- TEC, in kWh/day, is the daily Total Energy Consumption of the new RDC model as determined using AS1731.9-2003 and AS1731.12-2003 (as applicable) and recorded in the GEMS Registry;
- Baseline Efficiency, in kWh/day/m², is the corresponding figure for the type and temperature class of the new RDC model as determined by AS1731.14-2003 in Table F1.1 below.
- TDA, in m², is the Total Display Area of the new RDC model as determined using AS1731.14-2003 and recorded in the GEMS Registry;
- Lifetime, in years, is the expected lifetime of the new RDC model, and is the corresponding figure for the type and temperature class of the new RDC model in Table F1.2 below

Table F1.1

Refrigerated Display Cabinet Type	Temperature class	Baseline efficiency (kWh/day/m ²)
RS1 - Unlit shelves	all	8.37
RS1 - Lit shelves	all	10.66
RS2 - Unlit shelves	all	8.49
RS2 - Lit shelves	all	11.32
RS3 - Unlit shelves	all	10.32
RS3 - Lit shelves	all	12.26
RS4 - Glass door	all	6.48
RS6 - Gravity coil	all	7.62
RS6 - Fan coil	all	6.19
RS7 - Fan coil	all	6.68
RS8 - Gravity coil	all	8.52
RS8 - Fan coil	all	6.26
RS9 - Fan coil	all	6.03
RS10 - Low	all	10.80
RS11	all	26.52
RS12	all	46.14
RS13 - Solid sided	all	12.99
RS13 - Glass sided	all	12.47
RS14 - Solid sided	all	11.45
RS14 - Glass sided	all	12.59
RS15 - Glass door	all	20.22

RS16 - Glass door	all	20.12
RS18	all	29.92
RS19	all	29.57
HC1	M1	7.86
HC1	M2	8.50
HC4	M1	10.47
HC4	M2	11.40
HF4	L1	19.50
HF4	L2	19.50
HF6	L1	5.90
HF6	L2	5.46
VC1	M1	24.24
VC1	M2	14.22
VC2	M1	15.97
VC2	M2	14.72
VC4 (a) - Solid Door	M1	5.37
VC4 (a) - Solid Door	M2	7.30
VC4 (b) - Glass Door	M1	8.37
VC4 (b) - Glass Door	M2	9.70
VF4 (b) - Solid Door	L1	32.40
VF4 (b) - Solid Door	L2	28.70
VF4 (b) - Glass Door	L1	23.94
VF4 (b) - Glass Door	L2	28.70

Lifetime

The Energy Savings from the installation of a new Refrigerated Display Cabinet are assumed to persist at a constant level for the expected lifetime of the RDC. The Lifetime, in years, is the figure corresponding to the display type and temperature class in Table F1.2 below.

Table F1.2

Refrigerated Display Cabinet Type	Temperature class	Lifetime (years)
all	all	8

Activity Definition F2

Name of Activity

INSTALL A NEW HIGH EFFICIENCY LIQUID CHILLING PACKAGE

Equipment Requirements

1. The End User Equipment must be a Liquid Chilling Package (LCP) registered under GEMS and comply with the Greenhouse and Energy Minimum Standards (Liquid-chilling Packages Using the Vapour Compression Cycle) Determination 2012.
2. The LCP must have an IPLV at least 10% greater than the *Baseline* for the corresponding figure for the type and cooling capacity in Table F2.1.

Installation Requirements

1. The LCP must be installed.

Equipment Energy savings

$$\text{Deemed Equipment Electricity Savings} = (\text{Capacity} \div \text{Baseline} - \text{Capacity} \div \text{IPLV}) \times \text{EFLH} \times \text{Lifetime} / 1000$$

Where:

- *Capacity*, in kWR, is the total rated cooling capacity of the new Liquid Chilling Package as determined using AS/NZS 4776 Series of Standards and recorded in the GEMS Registry.
- *Baseline* is the corresponding figure for the cooling capacity class and type of the new Liquid Chilling Package as determined by AS/NZS 4776 Series of Standards in Table F2.1 below. The *Baseline* has been determined using the lower value of either the minimum standard using AS/NZS 4776 or the average efficiency of registered products on the GEMS Registry.
- IPLV is the Integrated Part Load Value of the new Liquid Chilling Package as determined using AS/NZS 4776 and recorded in the GEMS Registry.
- *EFLH* is the Equivalent Full Load Hours and is the corresponding figure for the cooling capacity class and type of the new Liquid Chilling Package in Table F2.1 below. The EFLH has been estimated using the low estimate of operating hours in the *Decision Regulation Impact Statement: Minimum Energy Performance Standards and Alternative Strategies for Chillers, July 2008*.
- *Lifetime*, in years, is the corresponding figure for the cooling capacity class and type of the new Liquid Chilling Package as determined by AS/NZS 4776 in Table F2.2 below.

Table F2.1

LCP type	Cooling capacity	Baseline (IPLV)	EFLH (hours)
Air cooled	350 to 499 kWR	4.6	1500
Air cooled	500 to 699 kWR	4.7	1500
Air cooled	700 to 999 kWR	4.7	1500
Air cooled	1000 to 1499 kWR	4.5	1500
Air cooled	Greater than 1500 kWR	4.1	1500
Water cooled	350 to 499 kWR	9.0	1500
Water cooled	500 to 699 kWR	8.6	1500
Water cooled	700 to 999 kWR	9.7	1500
Water cooled	1000 to 1499 kWR	9.0	1500
Water cooled	Greater than 1500 kWR	9.9	1500

Lifetime

The Energy Savings from the installation of a new Liquid Chilling Package are assumed to persist at a constant level for the expected lifetime of the LCP. The Lifetime, in years, is the figure corresponding to the type and capacity class in Table F2.2.

Table F2.2

LCP Type	Capacity class	Lifetime (years)
all	all	10

Activity Definition F3

Name of Activity

INSTALL A NEW HIGH EFFICIENCY CLOSE CONTROL AIR CONDITIONER

Equipment Requirements

1. The End User Equipment must be a Close Control Air Conditioner (CCAC) registered under GEMS and comply with the Greenhouse and Energy Minimum Standards (Close Control Air Conditioner) Determination 2012.
2. The CCAC must have an EER at least 20% greater than the *Baseline* for the corresponding figure for the type and cooling capacity in Table F3.1.

Installation Requirements

1. The CCAC must be installed.

Equipment Energy savings

$$\text{Deemed Equipment Electricity Savings} = (\text{Capacity} \div \text{Baseline} - \text{Capacity} \div \text{EER}) \times \text{Hours} \times \text{Lifetime} / 1000$$

Where:

- *Capacity*, in kW, is the total cooling capacity of the new CCAC as determined using AS/NZS 4965.1:2008 and recorded in the GEMS Registry.
- *Baseline* is the corresponding figure for the cooling capacity class of the new CCAC as determined by AS/NZS 4965.1:2008 in Table F3.1 below. The *Baseline* has been determined using the lower value of either the minimum standard using AS/NZS 4965.2:2008 or the average efficiency of registered products on the GEMS registered products for sale in Australia.
- *EER* is the Energy Efficiency Ratio as determined using AS/NZS 4965.1:2008 and recorded in the GEMS Registry.
- *Hours* is the annual operating hours and is the corresponding figure for the cooling capacity class of the new CCAC. The *Hours* has been estimated using the estimate of operating hours in the *Decision Regulation Impact Statement: Minimum Energy Performance Standards and Alternative Strategies for Close Control Air Conditioners, December 2008*.
- *Lifetime*, in years, is the corresponding figure for the cooling capacity class of the new CCAC as determined by AS/NZS 4965.1:2008 in Table F3.2 below.

Table F3.1

CCAC cooling capacity class	Baseline (EER)	Hours (hours p.a.)
Less than 19.05 kW	3.21	5694
19.05 to less than 39.5 kW	3.18	5694
39.5 to less than 70.0 kW	3.20	5694
Greater than or equal to 70.0 kW	3.18	5694

Lifetime

The Energy Savings from the installation of a new CCAC are assumed to persist at a constant level for the expected lifetime of the CCAC. The Lifetime, in years, is the figure corresponding to the type and capacity class in Table F3.2 below.

Table F3.2

CCAC capacity class	Capacity class	Lifetime (years)
all	all	10

Activity Definition F4

Name of Activity

INSTALL A NEW HIGH EFFICIENCY AIR CONDITIONER

Equipment Requirements

1. The End User Equipment must be an Air to Air Heat Pump or Air Conditioner (AC) registered under GEMS and comply with the Greenhouse and Energy Minimum Standards (Air to Air Heat Pump or Air Conditioner) Determination 2012
2. The AC must have an AEER at least 20% greater than the *Baseline Cooling AEER* for the corresponding figure for the type and cooling capacity in Table F4.1.
3. If the AC has a Heating Capacity registered in the GEMS Registry, the AC must have an AEER at least 20% greater than the *Baseline Heating AEER* for the corresponding figure for the type and heating capacity in Table F4.2.

Installation Requirements

1. The AC must not be installed in a Residential Building or Small Business Building.

Equipment Energy savings

Equation F4.1

Deemed Equipment Electricity Savings = Cooling Energy Savings + Heating Energy Savings

Where:

- *Cooling Energy Savings Capacity*, in MWh, is the lifetime energy savings in cooling mode, as calculated in Equation F4.2 below; and
- *Heating Energy Savings Capacity*, in MWh, is the lifetime energy savings in heating mode:
- as calculated in Equation F4.3 below; or
- is 0 MWh if the AC does not have a Heating Capacity registered in the GEMS Registry.

Equation F4.2

Cooling Electricity Savings = (Cooling Capacity ÷ Baseline Cooling AEER – Cooling Capacity ÷ AEER) x Cooling Hours x Lifetime / 1000

Where:

- *Cooling Capacity*, in kW, is the total cooling capacity of the new AC as determined using AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 and recorded in the GEMS Registry;
- *Baseline Cooling AEER* is Annual Energy Efficiency Ratio and is the corresponding figure for the cooling capacity of the new AC as determined by AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 in Table F4.1 or F4.2 below. The *Baseline Cooling AEER* has been determined using the lower value of either the minimum standard using AS/NZS 3823.2:2013 or the average efficiency of GEMS registered products for sale in Australia.
- *AEER* is the Annual Energy Efficiency Ratio for cooling as determined using AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 and recorded in the GEMS Registry
- *Cooling Hours*, in hours per annum, is the annual operating hours and is the corresponding figure for the cooling capacity of the new AC. *Cooling Hours* has been estimated using the estimate of operating hours in the *Decision Regulation Impact Statement: Minimum Energy Performance Standards for Air Conditioners, December 2010*.
- *Lifetime*, in years, is the corresponding figure for the cooling capacity of the new AC as determined by AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 in Table F4.3 below.

Table F4.1

AC type	Cooling capacity (kW)	Baseline Cooling AEER	Cooling Hours (hours p.a.)
Non ducted unitary	Less than 10kW	3.2	175
Non ducted unitary	10kW to <19kW	3.1	175
Non ducted split systems	Less than 4kW	3.7	175
Non ducted split systems	4kW to <10kW	3.2	175
Non ducted split systems	10kW to <19kW	3.1	175
Ducted systems	Less than 10kW	3.1	175
Ducted systems,	10kW to <19kW	3.1	175
All configurations,	19kW to <39kW	3.1	175

All configurations	39kW to 65kW	3.0	175
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Equation F4.3

$$\text{Heating Electricity Savings} = (\text{Heating Capacity} \div \text{Baseline Heating ACOP} - \text{Heating Capacity} \div \text{ACOP}) \times \text{Heating Hours} \times \text{Lifetime} / 1000$$

Where:

- *Heating Capacity*, in kW, is the total heating capacity of the new AC as determined using AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 and recorded in the GEMS Registry;
- *Baseline Heating ACOP* is Annual Coefficient of Performance and is the corresponding figure for the heating capacity of the new AC as determined by AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 in Table F4.1 or F4.2 below. The *Baseline Heating ACOP* has been determined using the lower value of either the minimum standard using AS/NZS 3823.2:2013 or the average efficiency of GEMS registered products for sale in Australia.
- *ACOP* is the Annual Coefficient of Performance for heating as determined using AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 and recorded in the GEMS Registry
- *Heating Hours*, in hours per annum, is the annual operating hours and is the corresponding figure for the heating capacity of the new AC. *Heating Hours* has been estimated using the estimate of operating hours in the *Decision Regulation Impact Statement: Minimum Energy Performance Standards for Air Conditioners, December 2010*.
- *Lifetime*, in years, is the corresponding figure for the heating capacity of the new AC as determined by AS/NZS 3823.1.1:2012, AS/NZS 3823.1.2:2012, or AS/NZS 3823.1.4:2012 in Table F4.3 below.

Table F4.2

AC type	Heating Capacity (kW)	Baseline Heating ACOP	Heating Hours (hours p.a.)
Non ducted unitary	Less than 10kW	3.2	88
Non ducted unitary	10kW to <19kW	3.1	88
Non ducted split systems	Less than 4kW	3.7	88
Non ducted split systems	4kW to 10kW	3.2	88
Non ducted split systems	10kW to 19kW	3.1	88
Ducted systems	Less than 10kW	3.1	88
Ducted systems,	10kW to 19kW	3.1	88
All configurations,	19kW to 39kW	3.1	88
All configurations	39kW to 65kW	3.0	88

Lifetime

The Energy Savings from the installation of a new AC are assumed to persist at a constant level for the expected lifetime of the AC. The Lifetime, in years, is the figure corresponding to the phase and capacity class in Table F4.3 below.

Table F4.3

Phase	Cooling Capacity or Heating Capacity	Lifetime (years)
all	all	10

Activity Definition F5

Name of Activity

INSTALL AN ELECTRONICALLY COMMUTATED MOTOR TO POWER A FAN IN AN INSTALLED REFRIGERATED DISPLAY CABINET, FREEZER OR COOL ROOM

Equipment Requirements

1. The End-User Equipment must be an electronically commutated (brushless DC) motor.
2. The nominal input power (W) of the End-User Equipment as declared by the manufacturer must be less than or equal to 500 W at full capacity with the impeller fitted.
3. The output power (W) or airflow volume (m³/hour) of the End-User Equipment as declared by the manufacturer must be equal to or greater than the existing refrigeration fan it replaces.
4. The End-User Equipment must meet any other requirements specified by the Scheme Administrator, including the suitability of the impeller for the motor.

Installation Requirements

1. The End-User Equipment must be installed into a refrigerated display cabinet or reach in freezer as defined by AS1731.1, or a cool room evaporator unit that is in use (i.e. not a new refrigeration system).
2. The End-User Equipment must replace an equivalent shaded pole motor or a permanent split capacitor motor as identified by the manufacturer of the End-User Equipment and accepted by the Scheme Administrator.
3. The installation must be according to manufacturer guidelines and any requirements specified by the Scheme Administrator.

Equipment Energy savings

$$\text{Deemed Equipment Electricity Savings} = (\text{Input Power} \times (a - \text{Average Power}) + b) \times (1 + (1 \div \text{COP})) \times \text{Hours} \times \text{Lifetime} / 10^6$$

Where:

- *Input Power*, in Watts, is the nominal input power of the new End User-Equipment at full throttle with the impeller fitted.
- *a* is the regression coefficient and *b* is the error in Regression Analysis between the nominal input power of a sample of fans powered by an electronically commutated motor and fans powered by a shaded pole motor or a permanent split capacitor motor and are the corresponding figures for the End-User Equipment nominal power consumption in table F5.1.
- *Average Power* is the average input power of the new End-User Equipment over a year compared to its nominal input power and is the corresponding figure the End-User Equipment’s control system in Table F5.2 below.
- *COP* is the co-efficient of performance of the refrigeration system and is the corresponding figure for the refrigeration system in table F5.3.
- *Hours* is the number of hours the fan is active per year and is the corresponding figure for the refrigeration system in table F5.3.
- *Lifetime*, in years, is the useful life of the End-User Equipment and is the corresponding figure for the refrigeration system in table F5.4.

Table F5.1

End-User Equipment nominal input power	<i>a</i>	<i>b</i>
Less than or equal to 34 W	1.7692	19.385
Greater than 34W and less than or equal to 500 W	1.2698	6.453

Table F5.2

Control system	<i>Average Power</i>
No control system in place	1
Temperature or pressure dependent speed control	0.8
Timer speed control (with low speed setting at least 8 hours per day)	0.8

Table F5.3

Refrigerator system type	<i>COP</i>	<i>Hours</i>
Refrigerated display cabinet	2.8	8000
Reach in freezer	1.8	8000
Cool room	2.6	8000

Lifetime

The energy savings from the new End User Equipment are assumed to persist at a constant level for the expected lifetime of the equipment. The Lifetime, in years, is the corresponding figure for the refrigerator system type in Table F5.4 below.

Table F5.4

Refrigerator type	Years
Refrigerated display cabinet	4
Reach in freezer	4
Cool room	7

Activity Definition F6**Name of Activity****INSTALL AN ELECTRONICALLY COMMUTATED MOTOR TO POWER A VENTILATION FAN****Equipment Requirements**

1. The End-User Equipment must be an electronically commutated (brushless DC) motor.
2. The nominal input power (W) of the End-User Equipment as declared by the manufacturer must be less than or equal to 500 W at full capacity with the impeller fitted.
3. The output power (W) or airflow volume (m³/hour) of the End-User Equipment as declared by the manufacturer must be equal to or greater than the existing ventilation fan it replaces.
4. The End-User Equipment must meet any other requirements specified by the Scheme Administrator, including the suitability of the impeller for the motor.

Installation Requirements

1. The End-User Equipment must be part of a ducted fan or partition fan in an air-handling system, as defined in ISO 13349:2010.
2. The End-User Equipment must replace an equivalent shaded pole motor or a permanent split capacitor motor as identified by the manufacturer of the End-User Equipment.
3. The installation must be according to manufacturer guidelines and any requirements specified by the Scheme Administrator.

Equipment Energy savings

$$\text{Deemed Equipment Electricity Savings} = (\text{Input Power} \times (a - \text{Average Power}) + b) \times \text{Hours} \times \text{Lifetime} / 10^6$$

Where:

- *Input Power*, in Watts, is the nominal input power of the new End User-Equipment at full throttle with the impeller fitted.
- *a* is the regression coefficient and *b* is the error in regression analysis between the nominal input power of a sample of fans powered by an electronically commutated motor and fans powered by a shaded pole motor or a permanent split capacitor motor and are the corresponding figures for the End-User Equipment nominal power consumption in table F6.1.
- *Average Power* is the average input power of the new End-User Equipment over a year compared to its nominal input power and is the corresponding figure the End-User Equipment's control system in Table F6.2.
- *Hours* is the number of hours the fan is active per year and is the corresponding figure in table F6.3 for the BCA building classification and Business Classification of the entity utilising the End-Use Service.
- *Lifetime*, in years, is the useful life of the End-User Equipment and is the corresponding figure for the ventilation system in table F6.4.

Table F6.1

End-User Equipment nominal input power	<i>a</i>	<i>b</i>
Less than or equal to 34 W	1.7692	19.385
Greater than 34W and less than or equal to 500 W	1.2698	6.453

Table F6.2

Control system	<i>Average Power</i>
No control system in place	1
Temperature or pressure dependent speed control	0.8
Timer speed control (with low speed setting at least 8 hours per day)	0.8

Table F6.3

BCA building classification	Business Classification	Annual operating hours
Class 2 (multi-unit dwellings)	Services provided by the body corporate or building owner	6300
Class 3 (hotels)	All	6300
Class 5 (offices)	All	2800
Class 6 (shops or shopping centres)	All	4000
Class 6 (restaurants or cafes)	All	5200
Class 7a (car parks)	All	6900
Class 7b (warehouses)	ANZSIC Division A (Agriculture, Forestry and Fishing)	8760
Class 7b (warehouses)	Other than ANZSIC Division A	5100
Class 8 (factories)	ANZSIC Division A (Agriculture, Forestry and Fishing)	5100

Class 8 (factories)	ANZSIC Division C (Manufacturing)	5100
Class 8 (factories)	Other than ANZSIC Division A or ANZSIC Division C	2800
Class 9a (clinics)	All	2800
Class 9a (hospitals)	All	8760
Class 9b (theatres)	All	5200
Class 9b (schools)	All	2000
Class 9c (aged care)	All	6300

Lifetime

The energy savings from the new End User Equipment are assumed to persist at a constant level for the expected lifetime of the equipment. The Lifetime, in years, is the corresponding figure for the fan type in F6.4 below.

Table F6.4

Fan type	Years
Ducted fan	7
Partition fan	7

Activity Definition F7

Name of Activity
INSTALL A NEW HIGH EFFICIENCY MOTOR

Equipment Requirements

1. The End-User Equipment must be a 3 phase electric motor rated ‘high efficiency’ within the meaning of AS1359.5:2004 when tested in accordance with AS 1359.102.1:1997 and AS 1359.102.3:2003
2. The electric motor must be a registered product under GEMS and comply with the Greenhouse and Energy Minimum Standards (Three Phase Cage Induction Motors) Determination 2012.

Installation Requirements

1. The electric motor must be installed.
2. The electric motor must have a rated output from 0.73kW to <185kW.

Equipment Energy Savings

Deemed Equipment Electricity Savings = P x LUF x ((Baseline Efficiency – New Efficiency) ÷ 100) x Asset Life x 8760 ÷ 1000

Where:

- *P* is the rated output of the new electric motor as recorded in the GEMS Registry.
- *LUF* is the Default Load Utilisation Factors for the relevant High Efficiency Motor as set out in Table F7.1, where the Business Classification and End-Use Service relevant to the Energy Savings is known, or Table F7.2 otherwise.
- *Baseline Efficiency*, in %, is
 - the Full Load Efficiency of the existing motor as determined using AS1359.5:2004 and recorded in the GEMS Registry; or
 - the corresponding value for the number of poles and rated output of the new electric motor from Table F7.3 if the existing motor is not listed in the GEMS Registry or if the new electric motor is New End User Equipment. For intermediate vales of rated output, the efficiency shall be determined by linear interpolation
- *New Efficiency*, in %, is the Full Load Efficiency of the new electric motor as determined using AS1359.5:2004 and recorded in the GEMS Registry.
- *Asset Life*, in years, of the High Efficiency Motor is set out in Table F7.4 for the corresponding rated output of the High Efficiency Motor.

Table F7.1 Default Load Utilisation Factor for High Efficiency Motors – Where Business Classification and End-Use Service are known

Load Utilisation Factor	Refrigeration and freezing	Water/liquid pumping	Air compression	Air handling, fans, ventilation	Process Drives	Milling, mixing, grinding	Material handling/ conveying
Division A Agriculture, Forestry and Fishing	0.14	0.32	0.27	0.28	0.32	0.2	0.2
Division B Mining	0.09	0.36	0.32	0.41	0.32	0.32	0.28
Division C Manufacturing	0.28	0.32	0.27	0.32	0.27	0.24	0.28
Division D Electricity, Gas, Water and Waste Services	0.11	0.32	0.24	0.28	0.28	0.12	0.17
Division E Construction	0.09	0.24	0.15	0.15	0.17	0.14	0.2
Division F Wholesale Trade	0.2	0.14	0.07	0.13	0.13	0.03	0.11
Division G Retail Trade	0.17	0.09	0.07	0.13	0.13	0.03	0.07
Division H Accommodation and Food Services	0.24	0.11	0.04	0.14	0.13	0.09	0.11
Division I Transport, Postal and Warehousing	0.17	0.11	0.08	0.13	0.17	0.03	0.16
Division J Information Media and Telecommunications	0.11	0.09	0.04	0.1	0.11	0.03	0.03
Division K Financial and Insurance Services	0.09	0.05	0.04	0.06	0.06	0.03	0.03
Division L Rental, Hiring and Real Estate Services	0.09	0.05	0.04	0.06	0.06	0.03	0.03
Division M Professional, Scientific and Technical Services	0.17	0.07	0.05	0.08	0.08	0.04	0.03
Division N Administrative and Support Services	0.11	0.05	0.04	0.06	0.04	0.03	0.03
Division O Public Administration and Safety	0.09	0.05	0.04	0.06	0.04	0.03	0.03
Division P Education and Training	0.11	0.05	0.04	0.06	0.04	0.03	0.03
Division Q Health Care and Social Assistance	0.11	0.08	0.11	0.06	0.06	0.03	0.03
Division R Arts and Recreation Services	0.09	0.05	0.04	0.06	0.04	0.03	0.03
Division S Other Services	0.07	0.05	0.04	0.06	0.04	0.03	0.03

Table F7.2 Default Load Utilisation Factor for High Efficiency Motors – Where Business Classification or End-Use Service are not known

Rated output (kW)	LUF
0.73 to < 2.6	0.09
2.6 to < 9.2	0.10
9.2 to < 41	0.11
41 to < 100	0.13
100 to < 185	0.15

Table F7.3

Rated Output (kW)	Baseline efficiency (%)			
	2 pole	4 pole	6 pole	8 pole
0.73	78.8	80.5	76.0	71.8
0.75	78.8	80.5	76.0	71.8
1.1	80.6	82.2	78.3	74.7
1.5	82.6	83.5	79.9	76.8
2.2	84.1	84.9	81.9	79.4
3	85.3	86.0	83.5	81.3
4	86.3	87.0	84.7	82.8
5.5	87.2	87.9	86.1	84.5
7.5	88.3	88.9	87.3	86.0
11	89.5	89.9	88.7	87.7
15	90.3	90.8	89.6	88.9
18.5	90.8	91.2	90.3	89.7
22	91.2	91.6	90.8	90.2
30	92.0	92.3	91.6	91.2
37	92.5	92.8	92.2	91.8
45	92.9	93.1	92.7	92.4
55	93.2	93.5	93.1	92.9
75	93.9	94.0	93.7	93.7
90	94.2	94.4	94.2	94.1
110	94.5	94.7	94.5	94.5
132	94.8	94.9	94.8	94.8
150	95.0	95.2	95.1	95.2
>150 < 185	95.0	95.2	95.1	95.2

Table F7.4 Asset Life for High Efficiency Motors (t)

Rated output (kW) of High Efficiency Motor	t (Asset life (years))
0.73 to < 2.6	12
2.6 to < 9.2	15
9.2 to < 41	20
41 to < 100	22
100 to < 185	25

Schedule G – Activity Definitions for ‘1 for 1’ Residential Downlight Replacement (clause 9.10)

Activity Definition G1

Name of Activity
REPLACE HALOGEN DOWNLIGHT WITH EFFICIENT LUMINAIRE AND/OR LAMP

Eligibility Requirements

1. The existing Lamp must be a Tungsten halogen Lamp (240V), Tungsten halogen Lamp (ELV) or Infrared coated (IRC) halogen Lamp (ELV) as defined in Table A9.1 of this Rule.
2. The existing Lamp must be a multifaceted reflector Lamp.
3. The existing Lamp must be rated at either 35W or 50W.
4. The existing Lamp and Luminaire must be in working order.

Equipment Requirements

1. The new End-User Equipment must be a LED Lamp and Driver, CFLi, LED Luminaire-recessed, or an LED Lamp Only – 240V Self Ballasted, as defined in Table A9.1 or Table A9.3 of Schedule A.
2. Any End-User Equipment classified under Table A9.3 must meet the requirements of Table A9.4 of Schedule A.
3. CFLs must have a Lamp Life of at least 10,000 hours when measured in accordance with Table A9.6 of Schedule A.
4. The new End-User Equipment must have an initial Downward Light Output of ≥ 500 lumens.
5. The new End-User equipment must have a beam angle consistent with the original Lamp being replaced.

Implementation Requirements

1. The activity must be performed or supervised by a licensed electrician.
2. ELV halogen Control Gear must be removed or replaced.

Equipment Energy Savings
Deemed Equipment Electricity Savings = Savings Factor

Where:

- *Savings Factor*, in MWh, is the value from Table G1.1 corresponding to the existing Lamp or Luminaire where the Lamp Circuit Power of the replacement Lamp being installed (in Watts); and
- *Lamp Circuit Power* is the Lamp Circuit Power of the replacement Lamp being installed (in Watts) and is measured in accordance with Table A9.4 of Schedule A.

Table G1.1 Savings Factor (MWh per Lamp replaced)

Existing Lamp and/or Luminaire	New Lamp and/or Luminaire	New Lamp Circuit Power (Watts)		
		≤5W	≤10W	≤15W
Tungsten halogen Lamp (ELV) with Electronic Transformer or Infrared coated (IRC) halogen Lamp (ELV) with Electronic Transformer.	LED Lamp and Driver	0.33	0.28	0.23
	CFLi			
Tungsten halogen Lamp (ELV) with Magnetic Transformer or Infrared coated (IRC) halogen Lamp (ELV) with Magnetic Transformer.	LED Lamp and Driver	0.39	0.34	0.29
	CFLi			
Luminaire with Tungsten halogen Lamp (ELV) and Electronic Transformer, or Luminaire with Infrared coated (IRC) halogen Lamp (ELV) and Electronic Transformer.	LED Luminaire - recessed	0.33	0.28	0.23
	CFLi			
Luminaire with Tungsten halogen Lamp (ELV) and Magnetic Transformer, or Luminaire with Infrared coated (IRC) halogen Lamp (ELV) and Magnetic Transformer.	LED Luminaire - recessed	0.39	0.34	0.29
	CFLi			
Tungsten halogen Lamp (240V)	LED Lamp only –240V Self Ballasted	0.45	0.40	0.35
	LED Lamp and Driver			
	CFLi			
Tungsten halogen Lamp (240V) and Luminaire	LED Luminaire – recessed	0.45	0.40	0.35

	CFLi with Luminaire			
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<p>Lifetime (for information purposes only) Lifetime = 10 years.</p>

NATIONAL PARKS AND WILDLIFE ACT 1974

Notice of Reservation of a National Park

I, General The Honourable David Hurley AC DSC (Ret'd), Governor of the State of New South Wales, with the advice of the Executive Council, reserve the land described in the Schedules 1 and 2 below as part of **Capertee National Park**, under the provisions of section 30A (1) of the *National Parks and Wildlife Act 1974*.

Signed and sealed at Sydney this 30th day of March 2016.

DAVID HURLEY

By His Excellency's Command,

MARK SPEAKMAN SC, MP
Minister for the Environment

GOD SAVE THE QUEEN

Land District – Mudgee LGA – Lithgow

County Roxburgh, and area totalling about 2733 hectares

Schedule 1

Parishes Airly, Capertee and Morundurey, about 2694 hectares being Lot 1 DP 739046, Lot 72 DP 755757, Lot 1441 DP 1153535, Lot 155 DP 722292, Lot 1 DP 739047 and that part of Lot 67 DP 722329 and part of Lot 7012 DP 1056868 as shown by hatching on the diagrams 1 and 2 below.

Papers OEH EF14/7290

Diagram 1

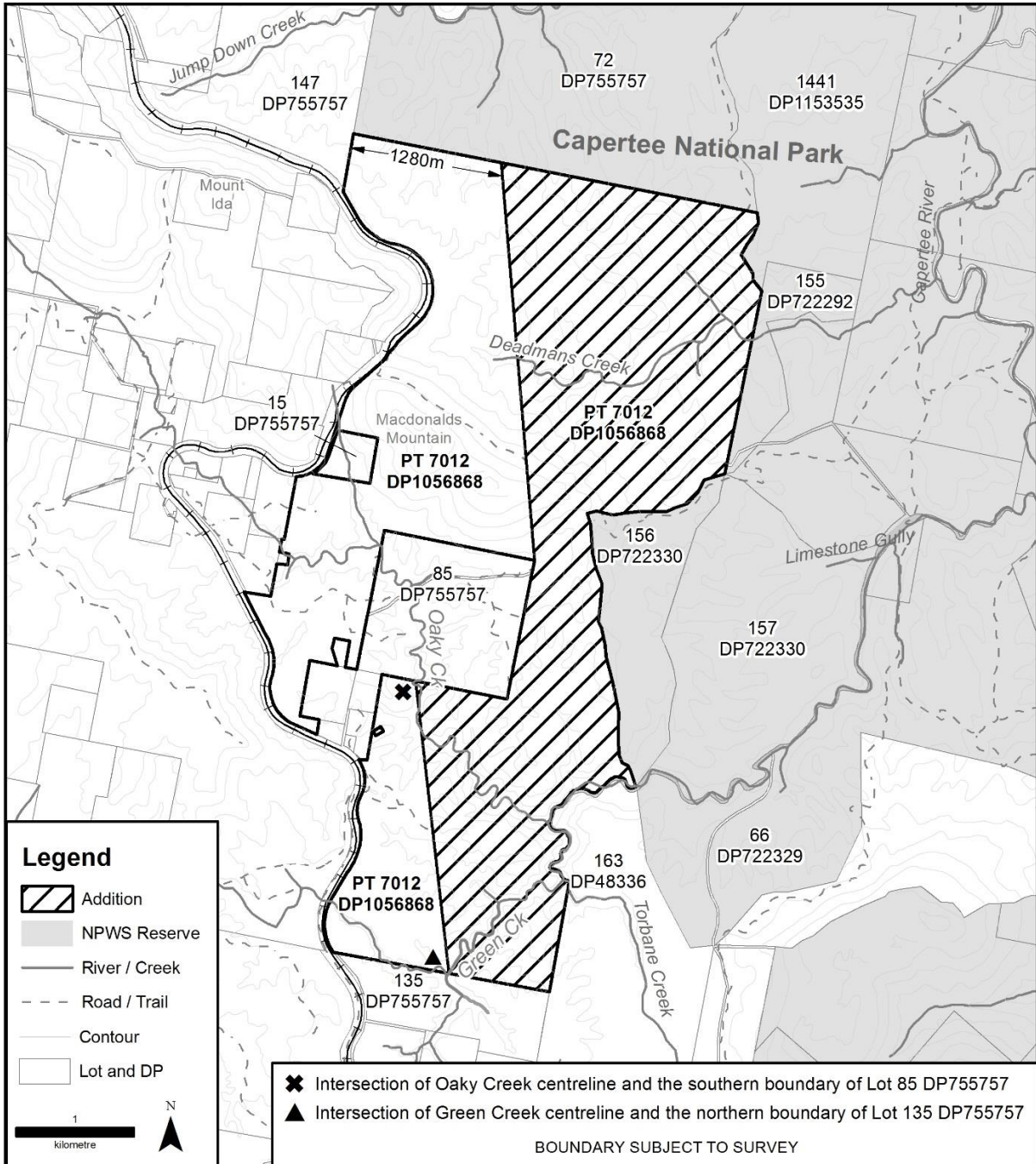
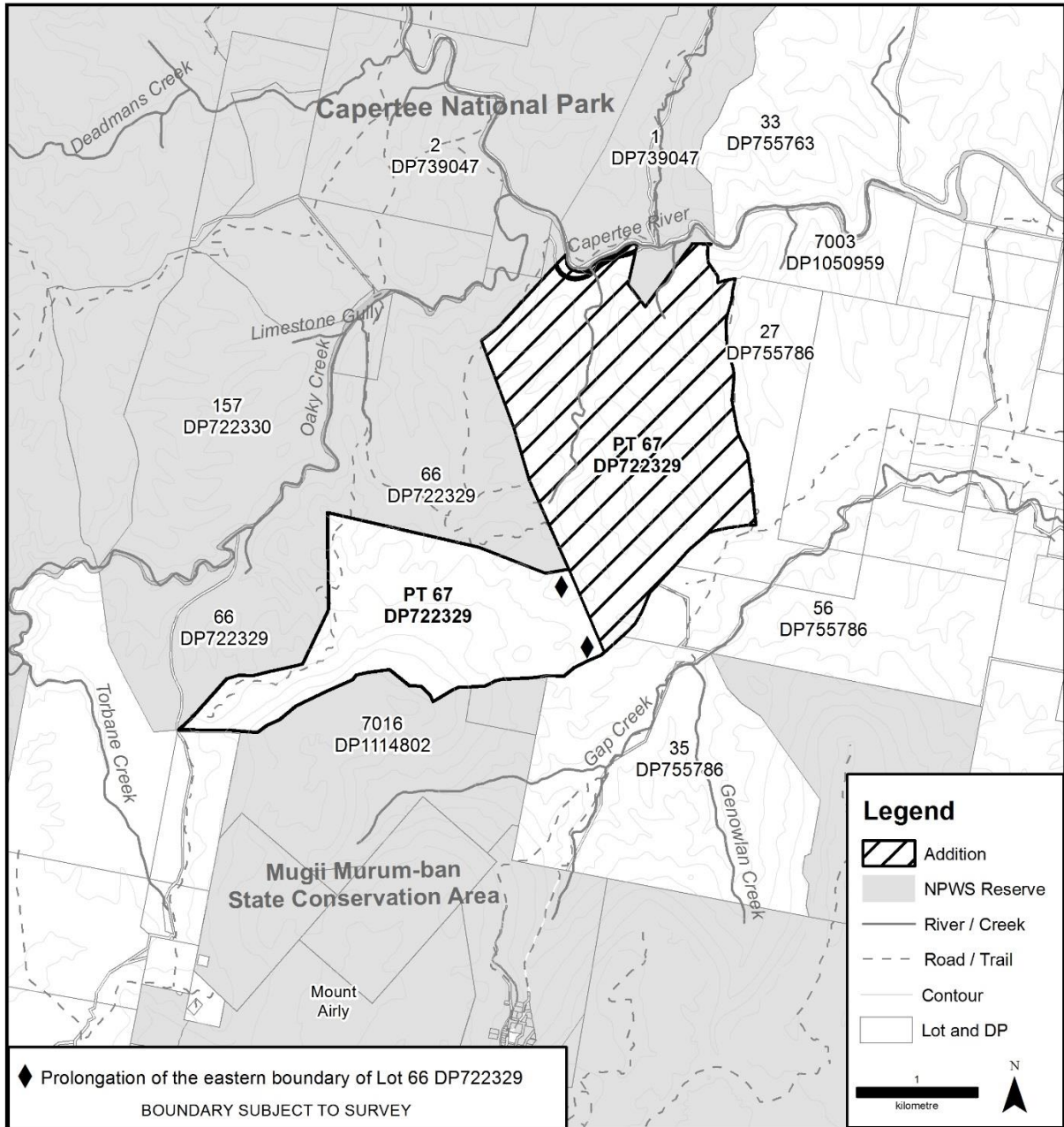


Diagram 2



Schedule 2

Parishes Airly, Capertee and Morundurey, about 39 hectares being the Crown roads within Lot 2 DP 739046, Lots 35 & 55 DP 755763, Lots 1 & 2 DP 739047, Lots 66, 67 & 68 DP 722329, Lot 155 DP 722292, Crown road separating Lots 1 & 2 DP 739046 from Ulumbra Creek, Crown road separating Lot 2 DP739046 from Capertee River and Crown road separating Lots 1 & 2 DP 739047 from Capertee River.

Appointments

CONSTITUTION ACT 1902

Ministerial Arrangements for the Minister for Education

Pursuant to section 36 of the *Constitution Act 1902*, His Excellency the Governor, with the advice of the Executive Council, has authorised The Honourable L G Williams MP to act for and on behalf of the Minister for Education for the period from 15 April to 1 May 2016 inclusive.

Dated: 6 April 2016

MIKE BAIRD, MP
Premier

CONSTITUTION ACT 1902

Ministerial Arrangements for the
Minister for Industry, Resources and Energy

Pursuant to section 36 of the *Constitution Act 1902*, His Excellency the Governor, with the advice of the Executive Council, has authorised The Honourable G D Barilaro MP to act for and on behalf of the Minister for Industry, Resources and Energy for the period from 11 April to 23 April 2016 inclusive.

Dated: 6 April 2016

MIKE BAIRD, MP
Premier

CONSTITUTION ACT 1902

Ministerial Arrangements for the Minister for Health

Pursuant to section 36 of the *Constitution Act 1902*, His Excellency the Governor, with the advice of the Executive Council, has authorised the Honourable P J Goward MP to act for and on behalf of the Minister for Health for the period from 9 April to 20 April 2016, inclusive.

Dated: 6 April 2016

MIKE BAIRD, MP
Premier

Planning and Environment Notices

HERITAGE ACT 1977

Notice of Listing on the State Heritage Register
under Section 37 (1) (b)

Urana Soldiers' Memorial Hall
Anna Street, Urana

SHR No 1966

In pursuance of section 37 (1) (b) of the *Heritage Act 1977* (NSW), the Heritage Council gives notice that the item of environmental heritage specified in Schedule "A" has been listed on the State Heritage Register in accordance with the decision of the Minister for Heritage made on 24 March 2016 to direct the listing. This listing applies to the curtilage or site of the item, being the land described in Schedule "B".

HERITAGE COUNCIL OF NEW SOUTH WALES

Schedule "A"

The item known as the Urana Soldiers' Memorial Hall, situated on the land described in Schedule "B".

Schedule "B"

All those pieces or parcels of land known as Lot 1 DP 1109878 and Lot 2 DP 1109877 in Parish of Urana, County of Urana shown on the plan catalogued HC 2737 in the office of the Heritage Council of New South Wales.

HERITAGE ACT 1977

Notice of Listing on the State Heritage Register
under Section 37 (1) (b)

Wingham Memorial Town Hall
52 Farquhar Street, Wingham

SHR No 1967

In pursuance of section 37 (1) (b) of the *Heritage Act 1977* (NSW), the Heritage Council gives notice that the item of environmental heritage specified in Schedule "A" has been listed on the State Heritage Register in accordance with the decision of the Minister for Heritage made on 24 March 2016 to direct the listing. This listing applies to the curtilage or site of the item, being the land described in Schedule "B".

HERITAGE COUNCIL OF NEW SOUTH WALES

Schedule "A"

The item known as the Wingham Memorial Town Hall, situated on the land described in Schedule "B".

Schedule "B"

All those pieces or parcels of land known as Part Lot 124 DP 713925 in Parish of Wingham, County of Macquarie shown on the plan catalogued HC 2736 in the office of the Heritage Council of New South Wales.

HERITAGE ACT 1977

Notice of Listing on the State Heritage Register under
Section 37 (1) (b)

Avoca Homestead Complex
1122A Low Darling Rd, Wentworth

SHR No 1971

In pursuance of section 37 (1) (b) of the *Heritage Act 1977* (NSW), the Heritage Council gives notice that the item of environmental heritage specified in Schedule "A" has been listed on the State Heritage Register in accordance with the decision of the Minister for Heritage made on 24 March 2016 to direct the listing. This listing applies to the curtilage or site of the item, being the land described in Schedule "B".

HERITAGE COUNCIL OF NEW SOUTH WALES

Schedule "A"

The item known as the Avoca Homestead Complex, situated on the land described in Schedule "B".

Schedule "B"

All those pieces or parcels of land known as Part Lot 3 DP 1010380 in Parish of Avoca, County of Wentworth shown on the plan catalogued HC 2635 in the office of the Heritage Council of New South Wales.

NATIONAL PARKS AND WILDLIFE ACT 1974

Oolambeyan National Park Plan of Management
Joadja and Wollondilly River Nature Reserves
Plan of Management

The Oolambeyan National Park Plan of Management — was adopted by the Minister for the Environment on 18 March 2014.

The Joadja and Wollondilly River Nature Reserves Plan of Management — was adopted by the Minister for the Environment on 16 June 2013.

The plans are available on the web at: www.environment.nsw.gov.au/parkmanagement/parkmanagementplans.htm

Roads and Maritime Notices

TRANSPORT ADMINISTRATION ACT 1988

LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991

Notice of Compulsory Acquisition of Land for the
Purposes of Rail Corporation New South Wales

Rail Corporation New South Wales, with the approval of His Excellency the Governor, declares that the land described in the Schedule hereto is acquired by compulsory process under the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991* for the purposes of Rail Corporation New South Wales, as authorised by the *Transport Administration Act 1988*.

Dated this 31st day of March 2016

HOWARD COLLINS
A/Chief Executive

Schedule

(Land and Easements)

All that piece or parcel of Crown land situate at Sydney in the Local Government Area of City of Sydney, Parish of St James, County of Cumberland, being Lots 1,2,3,4,5 & 6 in Deposited Plan 1184311.

The land is said to be in the possession of the Crown and the City of Sydney as Reserve Trustee for Hyde Park (D500450) Reserve Trust.

RailCorp Reference 301742

All that piece or parcel of land situated at Martin Place in the Parish of St. James, County of Cumberland and Local Government Area of City of Sydney shown as Lot 100 and easement for support designated as (A), in Deposited Plan 1188588.

The land is said to be in possession of the Crown and the City of Sydney as Reserve Trustee for Martin Place (R88056) Reserve Trust.

RailCorp Reference: 304067

All that piece or parcel of Crown land situate at Sydney in the Local Government Area of City of Sydney, Parish of St Phillip, County of Cumberland, being Lot 1 in Deposited Plan 1016268 having an area of 7.952 square metres.

The land is said to be in possession of the Crown and the City of Sydney as Reserve Trustee for Wynyard Park (D500505) Reserve Trust.

RailCorp reference 007012

An easement for railway transit affecting Crown land situate at Sydney in the Local Government Area of City of Sydney, Parish of St Lawrence, County of Cumberland being Lot 1 Deposited Plan 874757 and defined as (A) in Deposited Plan 1146193.

The land is said to be in the possession of the Crown and the City of Sydney as Reserve Trustee for Prince Alfred Park (D500038) Reserve Trust

RailCorp reference 304087

Mining and Petroleum Notices

Notice is given that the following applications have been received:

EXPLORATION LICENCE APPLICATIONS

(T16-1021)

No 5266, PAUL LOUIS FORNER AND PETER JOHN FORNER, area of 9 units, for Group 2, dated 15 March 2016. (Lightning Ridge Mining Division).

(T16-1022)

No 5267, BACCHUS RESOURCES PTY LTD (ACN 606 340 872), area of 74 units, for Group 1, dated 18 March 2016. (Orange Mining Division).

(T16-1027)

No 5271, COPETON DIAMOND MINES PTY LTD (ACN 601 157 475), area of 81 units, for Group 1, dated 30 March 2016. (Armidale Mining Division).

The Hon ANTHONY ROBERTS, MP
Minister for Industry, Resources and Energy

Notice is given that the following application has been granted:

EXPLORATION LICENCE APPLICATION

(T15-1078)

No 5203, now Exploration Licence No 8424, AUSMON RESOURCES LTD (ACN 134 358 964), County of Canbelego, Map Sheet (8134, 8135), area of 8 units, for Group 1, dated 17 February 2016, for a term until 17 February 2019.

The Hon ANTHONY ROBERTS, MP
Minister for Industry, Resources and Energy

Notice is given that the following applications for renewal have been received:

(11-0040)

Authorisation No 286, SECRETARY NSW DEPT INDUSTRY SKILLS & REGIONAL DEVELOPMENT ON BEHALF OF CROWN, area of 7859 square kilometres. Application for renewal received 1 April 2016.

(16-0522)

Authorisation No 339, BOGGABRI COAL PTY LIMITED (ACN 122 087 398), CHUGOKU ELECTRIC POWER AUSTRALIA RESOURCES PTY. LTD. (ACN 600 294 068) AND NS BOGGABRI PTY LIMITED (ACN 113 447 313), area of 890 hectares. Application for renewal received 29 March 2016.

(16-0519)

Exploration Licence No 5460, ANGLO COAL (DRAYTON SOUTH) PTY LTD (ACN 081 072 755), ANGLO COAL (DRAYTON) NO. 2 PTY LIMITED (ACN 004 917 177), DAESUNG AUSTRALIA PTY LIMITED (ACN 002 011 967), HYUNDAI AUSTRALIA PTY LTD (ACN 002 008 657), MITSUI DRAYTON INVESTMENT PTY LTD (ACN 082 138 529) AND NCE AUSTRALIA PTY LTD

(ACN 001 799 444), area of 6280 hectares. Application for renewal received 31 March 2016.

(05-0281)

Exploration Licence No 6552, CLANCY EXPLORATION LIMITED (ACN 105 578 756) AND KAIZEN FAIRHOLME PTY LTD (ACN 168 168 778), area of 19 units. Application for renewal received 1 April 2016.

(16-0521)

Mining Lease No 1388 (Act 1992), AUSTAR COAL MINE PTY LIMITED (ACN 111 910 822), area of 15.12 hectares. Application for renewal received 31 March 2016.

The Hon ANTHONY ROBERTS, MP
Minister for Industry, Resources and Energy

TRANSFERS

(15-2232)

Authorisation No 81, formerly held by TOYOTA TSUSHO MINING (AUSTRALIA) PTY LIMITED, CHUBU ELECTRIC POWER INTEGRA PTY LTD (ACN 149 527 971), JFE STEEL AUSTRALIA (GC) PTY LTD (ACN 113 447 466), NS GLENNIES CREEK PTY LIMITED (ACN 113 447 331) AND POS-GC PTY LTD (ACN 113 446 414) has been transferred to BLOOMFIELD COLLIERIES PTY LTD (ACN 000 106 972). The transfer was registered on 24 March 2016.

(15-2232)

Authorisation No 440, formerly held by CAMBERWELL COAL PTY LIMITED (ACN 003 825 018) has been transferred to BLOOMFIELD COLLIERIES PTY LTD (ACN 000 106 972). The transfer was registered on 24 March 2016.

(15-2232)

Coal Lease No 357 (Act 1973), formerly held by CAMBERWELL COAL PTY LIMITED (ACN 003 825 018) has been transferred to BLOOMFIELD COLLIERIES PTY LTD (ACN 000 106 972). The transfer was registered on 24 March 2016.

(15-0109)

Exploration Licence No 4918, formerly held by WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595) AND ICRA ASHTON PTY LTD (ACN 097 499 780) has been transferred to WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595). The transfer was registered on 24 March 2016.

(15-0109)

Exploration Licence No 5860, formerly held by WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595) AND ICRA ASHTON PTY LTD (ACN 097 499 780) has been transferred to WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595). The transfer was registered on 24 March 2016.

(15-0109)

Mining Lease No 1529 (Act 1992), formerly held by WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595) AND ICRA ASHTON PTY LTD (ACN 097 499 780) has been transferred to WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595). The transfer was registered on 24 March 2016.

(15-0109)

Mining Lease No 1533 (Act 1992), formerly held by WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595) AND ICRA ASHTON PTY LTD (ACN 097 499 780) has been transferred to WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595). The transfer was registered on 24 March 2016.

(15-0109)

Mining Lease No 1623 (Act 1992), formerly held by WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595) AND ICRA ASHTON PTY LTD (ACN 097 499 780) has been transferred to WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595). The transfer was registered on 24 March 2016.

(15-2232)

Mining Lease No 1630 (Act 1992), formerly held by MAITLAND MAIN COLLIERIES PTY LTD (ACN 000 012 652), NS GLENNIES CREEK PTY LIMITED (ACN 113 447 331) AND VALE AUSTRALIA (GC) PTY LTD (ACN 097 238 349) has been transferred to BLOOMFIELD COLLIERIES PTY LTD (ACN 000 106 972). The transfer was registered on 24 March 2016.

(15-2232)

Mining Lease No 1649 (Act 1992), formerly held by CAMBERWELL COAL PTY LIMITED (ACN 003 825 018) has been transferred to BLOOMFIELD COLLIERIES PTY LTD (ACN 000 106 972). The transfer was registered on 24 March 2016.

(15-2232)

Mining Lease No 1650 (Act 1992), formerly held by TOYOTA TSUSHO MINING (AUSTRALIA) PTY LIMITED, CHUBU ELECTRIC POWER INTEGRA PTY LTD (ACN 149 527 971), JFE STEEL AUSTRALIA (GC) PTY LTD (ACN 113 447 466), NS GLENNIES CREEK PTY LIMITED (ACN 113 447 331) AND POS-GC PTY LTD (ACN 113 446 414) has been transferred to BLOOMFIELD COLLIERIES PTY LTD (ACN 000 106 972). The transfer was registered on 24 March 2016.

(15-0109)

Mining Lease No 1696 (Act 1992), formerly held by WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595) AND ICRA ASHTON PTY LTD (ACN 097 499 780) has been transferred to WHITE MINING (NSW) PTY LIMITED (ACN 089 414 595). The transfer was registered on 24 March 2016.

The Hon ANTHONY ROBERTS, MP
Minister for Industry, Resources and Energy

Primary Industries Notices

FISHERIES MANAGEMENT ACT 1994

FISHERIES MANAGEMENT (AQUACULTURE) REGULATION 2012

Notification under Clause 27 (4)

Proposed Tender of Aquaculture Leases in Various Estuaries of NSW

NSW Department of Primary Industries (NSW DPI) is offering by public tender twenty four (24) areas of public water land in various estuaries of NSW, for the purpose of oyster aquaculture.

Lease No	Lease Area (ha)	Estuary	OISAS status	GIS survey required	Minimum Tender Premium
OL68/417	0.4806	Macleay River	POAA	No	\$200
OL97/026	0.4154	Macleay River	POAA	No	\$200
OL83/125	0.1915	Hastings River	Non-POAA	No	\$200
OL85/173	0.6650	Hastings River	POAA	No	\$200
OL95/023	0.3136	Hastings River	Non-POAA	No	\$200
OL65/097	0.1796	Wallis Lake	POAA	No	\$200
OL67/078	0.3516	Wallis Lake	POAA	No	\$200
OL68/048	0.8532	Wallis Lake	POAA	No	\$200
OL68/440	1.1768	Wallis Lake	POAA	No	\$200
OL79/072	0.2696	Wallis Lake	POAA	No	\$200
OL81/032	0.2217	Wallis Lake	POAA	No	\$200
OL81/033	0.2144	Wallis Lake	POAA	No	\$200
OL81/214	0.4202	Wallis Lake	POAA	No	\$200
OL82/038	0.9767	Wallis Lake	POAA	No	\$200
OL83/069	1.2382	Wallis Lake	POAA	No	\$200
OL83/285	2.0119	Wallis Lake	POAA	No	\$200
OL84/061	0.2577	Wallis Lake	POAA	No	\$200
OL84/232	0.7075	Wallis Lake	POAA	No	\$200
OL70/163	0.6163	Port Stephens	POAA	No	\$200
OL79/152	0.6545	Port Stephens	POAA	No	\$200
OL62/020	0.8769	Brisbane Water	POAA	No	\$200
OL78/095	0.4152	Hawkesbury River	POAA	No	\$200
OL86/248	1.1561	Hawkesbury River	POAA	No	\$200
OL91/016	0.4425	Hawkesbury River	POAA	No	\$200

All tenders must be marked 'Confidential' and submitted to: Tender Box, Port Stephens Fisheries Institute, Locked Bag 1, Nelson Bay NSW 2315. Tenders must be received at this address **no later than 4:30 pm on Friday 6 May 2016**.

The lease areas OL83/125 and OL95/023 have been identified as non-priority oyster aquaculture area (Non-POAA) and as such, development consent is required from the local Council.

A minimum tender premium of \$200 per lease has been applied to all lease areas being offered.

Any lease granted as a result of the tender will be subject to standard covenants and conditions of an aquaculture lease and aquaculture permit as prescribed under the *Fisheries Management Act 1994*, including payment of prescribed annual fees and charges. Lease rent is charged annually, currently at \$56 per hectare (excl. GST), which is subject to an annual Consumer Price Index adjustment. Tenure of a lease will be up to 15 years.

Government Notices

Leases will be tendered “as is” condition, where any existing improvements have not been valued and will become the responsibility of the leaseholder. An information package, which contains the Terms and Conditions of the tender and a tender form, can be obtained by contacting an Aquaculture Officer at the Port Stephens Fisheries Institute on (02) 4982 1232, or by visiting the department’s website at www.dpi.nsw.gov.au.

ANDREW GOULSTONE
Group Director Commercial Fisheries & Aquaculture
Fisheries Division
NSW Department of Primary Industries

Crown Lands Notices

1300 886 235 www.crownland.nsw.gov.au

ARMIDALE OFFICE

APPOINTMENT OF TRUST BOARD MEMBERS

Pursuant to section 93 of the *Crown Lands Act 1989*, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1	Column 2	Column 3
Stuart Arthur SHANNON (re-appointment)	Bonshaw Racecourse Reserve Trust	Reserve No 42857 Public Purpose: Racecourse Notified: 8 July 1908 File Reference: AE80R38
Ian Alan COVENTRY (re-appointment)		
Alexander Robert CAMPBELL (new member)		

For a term commencing the date of this notice and expiring 7 April 2021.

NOTICE OF PURPOSE OTHER THAN THE DECLARED PURPOSE PURSUANT TO SECTION 34A (2) (b) OF THE CROWN LANDS ACT 1989

Pursuant to section 34A (2) (b) of the *Crown Lands Act 1989*, the Crown reserve(s) specified in Column 2 of the Schedule is to be used or occupied under a relevant interest granted for the purpose(s) specified in Column 1 of the Schedule where such use or occupation is other than the declared purpose of the reserve.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1	Column 2
Stockpile	Reserve No 989 Public Purpose: Camping Notified: 5 July 1880 File Reference: 16/01845

DUBBO OFFICE

NOTICE OF PURPOSE OTHER THAN THE DECLARED PURPOSE PURSUANT TO SECTION 34A (2) (b) OF THE CROWN LANDS ACT 1989

Pursuant to section 34A (2) (b) of the *Crown Lands Act 1989*, the Crown reserve(s) specified in Column 2 of the Schedule is to be used or occupied under a relevant interest granted for the purpose(s) specified in Column 1 of the Schedule where such use or occupation is other than the declared purpose of the reserve.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1	Column 2
Environmental Protection	Reserve No 23836 Public Purpose: Water Notified: 26 February 1896 File Reference: 16/02177 Reserve No 78805 Public Purpose: Generally Notified: 3 August 1956 File Reference: 16/02177 Reserve No 80311 Public Purpose: Generally Notified: 24 January 1958 File Reference: 16/01897 Reserve No 755425 Public Purpose: Future Public Requirements Notified: 29 June 2007 File Reference: 16/01897

GOULBURN OFFICE

NOTICE OF PURPOSE OTHER THAN THE DECLARED PURPOSE PURSUANT TO SECTION 34A (2) (b) OF THE CROWN LANDS ACT 1989

Pursuant to section 34A (2) (b) of the *Crown Lands Act 1989*, the Crown reserve(s) specified in Column 2 of the Schedule is to be used or occupied under a relevant interest granted for the purpose(s) specified in Column 1 of the Schedule where such use or occupation is other than the declared purpose of the reserve.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1	Column 2
Environmental Rehabilitation	Reserve No 87445 Public Purpose: Public Recreation Notified: 10 October 1969 File Reference: 16/01694

GRAFTON OFFICE

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Bardsley; County – Fitzroy
Land District – Grafton; LGA – Clarence Valley*

Road Closed: Lot 1 DP 1215527
File No: 07/3177

Schedule

On closing, the land within Lot 1 DP 1215527 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Savernake; County – Denison
Land District – Corowa; LGA – Corowa*

Road Closed: Lot 4 DP 1215656
File No: 15/07651

Schedule

On closing, the land within Lot 4 DP 1215656 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – Ashby, Adowa; County – Arrawatta
Land District – Inverell; LGA – Inverell*

Road Closed: Lots 1–2 DP 1214360
File No: 15/07053

Schedule

On closing, the land within Lots 1–2 DP 1214360 remains vested in the State of New South Wales as Crown land.

On closing, the land within Lot 4 DP 750060 becomes vested in the State of New South Wales as Crown Land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – Adowa, Alpine; County – Arrawatta
Land District – Inverell; LGA – Inverell*

Road Closed: Lot 6 DP 1214361
File No: 15/07054

Schedule

On closing, the land within Lot 6 DP 1214361 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Manamoi; County – Jamison
Land District – Narrabri; LGA – Moree Plains*

Road Closed: Lot 2 DP 1212861
File No: 15/03760

Schedule

On closing, the land within Lot 2 DP 1212861 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Billaboo South; County – Jamison
Land District – Narrabri; LGA – Narrabri*

Road Closed: Lots 1–4 DP 1216407
File No: 15/09193

Schedule

On closing, the land within Lots 1–4 DP 1216407 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – Haning, Bendemeer; Gulligal
Counties – Inglis, Darling
Land District – Armidale; LGA – Tamworth Regional*

Road Closed: Lot 1 DP 1211610
File No: 15/00101

Schedule

On closing, the land within Lot 1 DP 1211610 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – North Bellingen; County – Raleigh
Land District – Bellingen; LGA – Bellingen*

Road Closed: Lot 1 DP 1216772
File No: 15/02997

Schedule

On closing, the land within Lot 1 DP 1216772 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – East Casino, South Casino; County – Richmond
Land District – Casino; LGA – Richmond Valley*

Road Closed: Lots 6–10 DP 1216852
File No: 15/07376

Schedule

On closing, the land within Lots 6–10 DP 1216852 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Tarban; County – Clive
Land District – Tenterfield; LGA – Tenterfield*

Road Closed: Lot 1 DP 1202005
File No: 14/03140

Schedule

On closing, the land within Lot 1 DP 1202005 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – Bobbiwaa, Tarlee; County – Jamison
Land District – Narrabri; LGA – Narrabri*

Road Closed: Lot 12 DP 1216499
File No: 14/03513

Schedule

On closing, the land within Lot 12 DP 1216499 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Terania; County – Rous
Land District – Lismore; LGA – Lismore*

Road Closed: Lot 1 DP 1216498
File No: 15/08021

Schedule

On closing, the land within part Lot 1 DP 1216498 remains vested in the State of New South Wales as Crown land.

On closing, the land within part Lot 1 DP 1216498 becomes vested in the State of New South Wales as Crown Land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Falls; County – Clarke
Land District – Armidale; LGA – Guyra*

Road Closed: Lot 1 DP 1212262
File No: 15/06252

Schedule

On closing, the land within Lot 1 DP 1212262 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Duval; County – Sandon
Land District – Armidale; LGA – Armidale Dumaresq*

Road Closed: Lot 2 DP 1216579
File No: 15/03637

Schedule

On closing, the land within Lot 2 DP 1216579 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Ollera; County – Hardinge
Land District – Inverell; LGA – Guyra*

Road Closed: Lot 2 DP 1217615
File No: 15/10574

Schedule

On closing, the land within Lot 2 DP 1217615 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Katambone; County – Denham
Land District – Narrabri; LGA – Walgett*

Road Closed: Lot 11 DP 1214421
File No: ME06H96

Schedule

On closing, the land within Lot 11 DP 1214421 remains vested in the State of New South Wales as Crown land.

APPOINTMENT OF TRUST BOARD MEMBERS

Pursuant to section 93 of the *Crown Lands Act 1989*, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1	Column 2	Column 3
Allan John SHEATHER (new member)	Wardell Recreation Ground Trust	Reserve No 627 Public Purpose: Public Recreation Notified: 14 June 1880
Susan May STEEL (re-appointment)		Reserve No 1002921 Public Purpose: Community and Sporting Club Facilities Notified: 31 March 2000
Warren Leslie BARNES (re-appointment)		File Reference: GF84R110-002
Roy LAMOON (re-appointment)		

For a term commencing the date of this notice and expiring 7 April 2021.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Ulmarra; County – Clarence
Land District – Grafton; LGA – Clarence Valley*

Road Closed: Lots 1–2 DP 1217457
File No: 10/14570

Schedule

On closing, the land within Lots 1–2 DP 1217457 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Belmore; County – Raleigh
Land District – Bellingen; LGA – Bellingen*

Road Closed: Lot 1 DP 1217351
File No: 13/12751

Schedule

On closing, the land within Lot 1 DP 1217351 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Tooma; County – Selwyn
Land District – Tumbarumba; LGA – Tumbarumba*

Road Closed: Lot 1 DP 1216946
File No: 15/03619

Schedule

On closing, the land within Lot 1 DP 1216946 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – Merrywinebone, Christie; County – Denham
Land District – Narrabri; LGA – Walgett*

Road Closed: Lot 122 DP 1215180
File No: 12/03588

Schedule

On closing, the land within Lot 122 DP 1215180 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Dewhurst; County – Denham
Land District – Walgett; LGA – Walgett*

Road Closed: Lot 3 DP 1216187
File No: 12/03592

Schedule

On closing, the land within Lot 3 DP 1216187 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Ketelghay; County – Raleigh
Land District – Bellingen; LGA – Nambucca*

Road Closed: Lot 1 DP 1213641
File No: GF06H164

Schedule

On closing, the land within Lot 1 DP 1213641 remains vested in the State of New South Wales as Crown land.

NEWCASTLE OFFICE

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Gulgong; County – Phillip
Land District – Mudgee; LGA – Mid-Western Regional*

Road Closed: Lot 1 DP 1214043
File No: 09/11801

Schedule

On closing, the land within Lot 1 DP 1214043 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Galwagere; County – Wellington
Land District – Wellington; LGA – Wellington*

Road Closed: Lot 1 DP 1218052
File No: 09/15479

Schedule

On closing, the land within Lot 1 DP 1218052 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Guntawang; County – Phillip
Land District – Mudgee; LGA – Mid-Western Regional*

Road Closed: Lot 1 DP 1216649
File No: 14/05133

Schedule

On closing, the land within Lot 1 DP 1216649 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parishes – Burrendong, Ironbarks; County – Wellington
Land District – Wellington; LGA – Wellington*

Road Closed: Lots 1–2 DP 1214457 (subject to easement for Transmission Line and a Right of Carriageway created by Deposited Plan 1214457)
File No: 09/11783 & 14/08888 RS

Schedule

On closing, the land within Lots 1–2 DP 1214457 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Ulourie; County – Clyde
Land District – Nyngan; LGA – Walgett*

Road Closed: Lot 1 DP 1214555 (subject to right of carriageway created by Deposited Plan DP 1214555)

File No: 15/05206

Schedule

On closing, the land within Lot 1 DP 1214555 remains vested in the State of New South Wales as Crown land.

NOTIFICATION OF CLOSING OF A ROAD

In pursuance of the provisions of the *Roads Act 1993*, the road hereunder described is closed and the lands comprised therein cease to be public road and the rights of passage and access that previously existed in relation to the road is extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Description

*Parish – Belah; County – Flinders
Land District – Nyngan; LGA – Lachlan*

Road Closed: Lot 1 DP 1217258

File No: 14/01941 RS

Schedule

On closing, the land within Lot 1 DP 1217258 remains vested in the State of New South Wales as Crown land.

NOWRA OFFICE

NOTICE OF PURPOSE OTHER THAN THE DECLARED PURPOSE PURSUANT TO SECTION 34A (2) (b) OF THE CROWN LANDS ACT 1989

Pursuant to section 34A (2) (b) of the *Crown Lands Act 1989*, the Crown reserve(s) specified in Column 2 of the Schedule is to be used or occupied under a relevant interest granted for the purpose(s) specified in Column 1 of the Schedule where such use or occupation is other than the declared purpose of the reserve.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1

Encroachments

Column 2

Reserve No 57023
Public Purpose: Preservation of Native Flora, Public Recreation
Notified: 24 April 1924
File Reference: 15/05997

Schedule

Column 1

Sporting Event

Column 2

Reserve No 90665
Public Purpose: Future Public Requirements
Notified: 24 April 1975
File Reference: 16/01257
Reserve No 91042
Public Purpose: Public Recreation
Notified: 17 February 1978
File Reference: 16/01257
Reserve No 95505
Public Purpose: Public Recreation
Notified: 10 July 1981
File Reference: 16/01257
Reserve No 755971
Public Purpose: Future Public Requirements
Notified: 29 June 2007
File Reference: 16/01257

SYDNEY METROPOLITAN OFFICE

NOTICE OF PURPOSE OTHER THAN THE DECLARED PURPOSE PURSUANT TO SECTION 34A (2) (b) OF THE CROWN LANDS ACT 1989

Pursuant to section 34A (2) (b) of the *Crown Lands Act 1989*, the Crown reserve(s) specified in Column 2 of the Schedule is to be used or occupied under a relevant interest granted for the purpose(s) specified in Column 1 of the Schedule where such use or occupation is other than the declared purpose of the reserve.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1	Column 2
Access; Site Investigation	Reserve No 1003168 Public Purpose: Public Recreation, Environmental Protection Notified: 5 April 2002 File Reference: 16/00529

ROADS ACT 1993

ORDER

Transfer of a Crown Road to Council

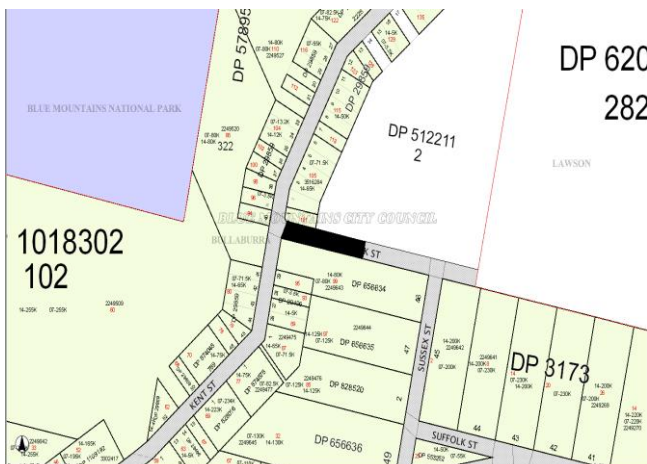
In pursuance of the provisions of section 151, *Roads Act 1993*, the Crown public road specified in Schedule 1 is transferred to the Roads Authority specified in Schedule 2, as from the date of publication of this notice and from that date the road specified in Schedule 1 ceases to be a Crown public road.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule 1

*Land District – Penrith
Local Government Area – Blue Mountains City
Parish – Jamison; County – Cook*

Crown public road known as Norfolk Street at Bullaburra as shown by solid black shading on the diagram hereunder.



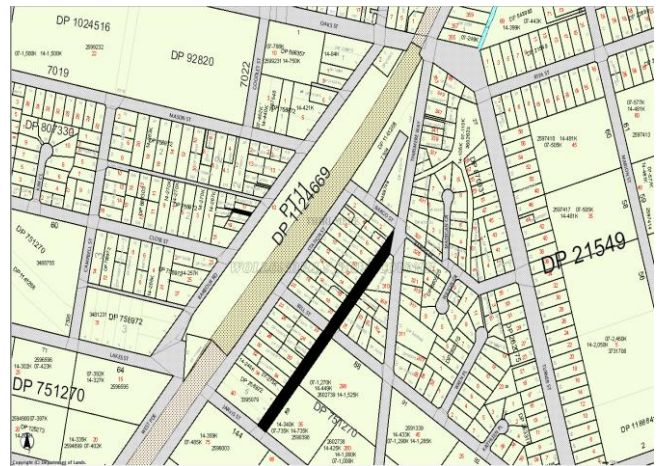
Schedule 2

Roads Authority: Blue Mountains City Council
File No: 16/01899

Schedule 1

*Land District – Picton
Local Government Area – Wollondilly Shire
Parish – Couridjah; County – Camden*

Crown public road known as Antill Street at Thirlmere as shown by solid black shading on the diagram hereunder.



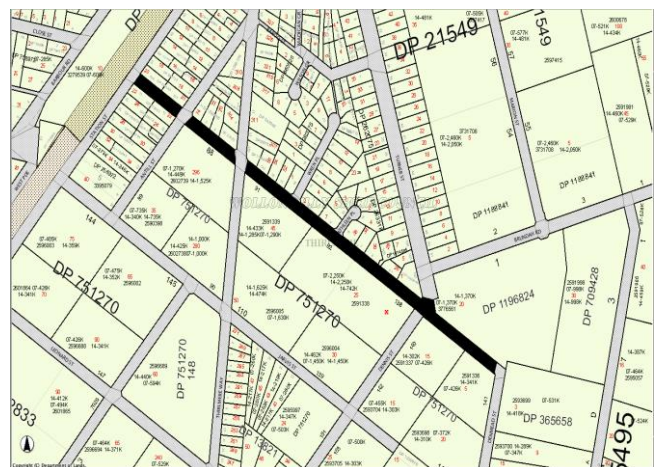
Schedule 2

Roads Authority: Wollondilly Shire Council
File No: 16/02575

Schedule 1

*Land District – Picton
Local Government Area – Wollondilly Shire
Parish – Couridjah; County – Camden*

Crown public road known as Bell Street at Thirlmere as shown by solid black shading on the diagram hereunder.



Schedule 2

Roads Authority: Wollondilly Shire Council
File No: 16/02575

TAREE OFFICE

**NOTICE OF PURPOSE OTHER THAN
THE DECLARED PURPOSE PURSUANT
TO SECTION 34A (2) OF THE
CROWN LANDS ACT 1989**

Pursuant to section 34A (2) (b) of the *Crown Lands Act 1989*, the Crown reserve(s) specified in Column 2 of the Schedule is to be used or occupied under a relevant interest granted for the purpose(s) specified in Column 1 of the Schedule where such use or occupation is other than the declared purpose of the reserve.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule

Column 1

Oyster Farming Activities
(Relevant Interest – S34A)
RI 560401)
File No TE79H14

Column 2

Reserve No 1012048
Public Purpose: Access
and Public Requirements,
Tourism Purposes and
Environmental and Heritage
Conservation.

Notified: 4 August 2006

Reserve No 754405
Public Purpose: for Future
Public Requirements
Notified: 18 July 2008

Reserve No 210080
Public Purpose: for
Environmental Protection
and Public Recreation
Notified: 6 April 1990

Oyster Farming Activities
(Relevant Interest – S34A)
RI 560399)
File No TE79H15

Reserve No 1012048
Public Purpose: Access
and Public Requirements,
Tourism Purposes and
Environmental and Heritage
Conservation.

Notified: 4 August 2006

Reserve No 754405
Public Purpose: for Future
Public Requirements
Notified: 18 July 2008

Reserve No 210080
Public Purpose: for
Environmental Protection
and Public Recreation
Notified: 6 April 1990

WAGGA WAGGA OFFICE

**DECLARATION OF CROWN LAND
AS PUBLIC ROAD**

Pursuant to section 12 of the *Roads Act 1993*, the Crown Land specified in Schedule 1 is, from the date of publication of this notice, dedicated as public road. The public road is declared to be Crown road within the meaning of the *Roads Act 1993*.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule 1

*Parish – Tarrarandra; County – Wynyard
LGA – Gundagai Shire Council*

Lot 10 DP 252340

Reference: WA95H108-02

ROADS ACT 1993

ORDER

Transfer of Crown Road to a Council

In pursuance of the provisions of section 151 of the Act, the Crown Road specified in Schedule 1 is transferred to the roads authority specified in Schedule 2 hereunder as from the date of publication of this notice and as from that date the road specified in Schedule 1 ceases to be a Crown road.

The Hon NIALL BLAIR, MLC
Minister for Lands and Water

Schedule 1

Parish:	Tarrarandra
County:	Wynyard
Land District:	Gundagai
LGA:	Gundagai Shire Council
Description:	Lot 10 DP 252340

Schedule 2

Roads Authority:	Gundagai Shire Council
Reference:	WA95H108-02

Other Government Notices

ANTI-DISCRIMINATION ACT 1977

Exemption Order

Under section 126 of the *Anti-Discrimination Act 1977*, an exemption is granted from sections 49ZYB (2) and 51 of the *Anti-Discrimination Act 1977* (NSW), to Penrith City Council to advertise and facilitate a training and development program, Certificate IV in Regulatory Services, internally to Council's outdoor operations workforce targeting up to eight positions in the program for Council employees over the age of 50 years

This exemption will remain in force for a period of five years from the date given in this Order.

Penrith City Council is to provide a six-monthly report to the Anti-Discrimination Board of New South Wales which sets out the number of candidates who have undertaken the training and development program, Certificate IV in Regulatory Services, since this Order was granted.

Dated this 31 March 2016.

ELIZABETH WING

Acting President

Anti-Discrimination Board of NSW

ASSOCIATIONS INCORPORATION ACT 2009

Cancellation of Registration Pursuant to Section 76

Take notice that the registration of the following associations is cancelled by this notice pursuant to section 76 of the *Associations Incorporation Act 2009*.

ACCEPTION INCORPORATED	INC9878167
ACCSA INCORPORATED	INC9877802
ADSN (AGED DISABLED SUPPORT NETWORK) INCORPORATED	INC1200317
AINATA CHARITABLE ASSOCIATION INCORPORATED	INC9874347
AIRDS FOCUS GROUP INCORPORATED	INC9880499
AIRES COLOMBIANOS INCORPORATED	INC9887004
ARIAH PARK – MIRROOL NETBALL CLUB INCORPORATED	INC9877380
ASI ES COLOMBIA FOLKLORIC DANCING GROUP INCORPORATED	Y2701340
ASIAN INSTITUTE OF TECHNOLOGY ALUMNI ASSOCIATION OF AUSTRALIA INCORPORATED	Y2523532
AUSTRALIA CHINESE TENNIS ASSOCIATION INCORPORATED	INC9880975

AUSTRALIAN CHINESE FU QUAN XIANG ART ASSOCIATION INCORPORATED	Y2812230
AUSTRALIAN CICHLID ENTHUSIASTS INCORPORATED	INC9881987
AUSTRALIAN KAREN CULTURAL ORGANIZATION INCORPORATED	INC9885895
AUSTRALIAN SOCIETY OF ISLAMIC PSYCHOLOGY INCORPORATED	INC9879258
BAULKHAM HILLS SENIOR CITIZENS INC	Y1656316
BYRON PEACE CARNIVAL INCORPORATED	INC9882876
CAPITAL COUNTRY DEVELOPMENT BOARD INCORPORATED	Y2869238
CASINO PISTOL CLUB INC	Y0916617
CCMA CENTRAL COAST MOTEL ASSOCIATION INCORPORATED	INC9875686
CENTRAL COAST CRAFTBREWERS INCORPORATED	INC1200052
CENTRAL COAST LANDCARE NETWORK INCORPORATED	Y2635713
COFFS COAST MICRO BUSINESS NETWORKING GROUP INCORPORATED	INC9897202
CONCERNED RESIDENTS AND BUSINESSES AGAINST CBD OVERDEVELOPMENT (CRABACO) INCORPORATED	INC9882576
EL SALVADOR SUPPOIRT NETWORK FMLN INCORPORATED	INC9884735
ESCUELA/COMPARSAS DE CANDOMBE MANOS LIBRES INC	INC9897216
FAMILIES EMBETTERMENT AND WELFARE (FEW) INCORPORATED	INC9880968
FINLEY ASSOCIATED STOCK & STATION AGENTS INCORPORATED	Y1781020
GOLDEN LAMPSTAND PUBLISHING SOCIETY AUST. INCORPORATED	Y2659203
GRAFTON ASTRONOMICAL SOCIETY INC	INC9880354

GREEN TARA INSTITUTE INCORPORATED	INC9883989	NAAT HUB-E-NABI SOCIETY INCORPORATED	INC9883788
HAMPASLUPA SOCIAL GOLF CLUB INCORPORATED	INC9880236	NEPEAN VALLEY R C SPEEDWAY INCORPORATED	INC9881888
HARDEN CRICKET CLUB INCORPORATED	Y2821817	NIUE COMMUNITY COUNCIL OF NEW SOUTH WALES INCORPORATED	Y3021214
HARRY'S CREEK LANDCARE GROUP INCORPORATED	INC9881329	NORKEL INCORPORATED	INC1501657
HIGH ROLLIN 4X4 CLUB INCORPORATED	INC9877780	NORTH COAST CHILDREN'S MOTORCYCLE TOY RUN INCORPORATED	INC9878440
HILLVIEW TENNIS CLUB INC	Y0557128	NORTHERN RIVERS ARTS HEALTH & WELLBEING INCORPORATED	INC9896258
HWA RANG TAEKWONDO AUSTRALIA INCORPORATED	Y2404836	NSW METROPOLITAN AND PROVINCIAL GREYHOUND CLUBS ASSOCIATION INCORPORATED	INC9874197
ICTOVIA (IMPLEMENTING CHANGE THROUGH OVERSEAS VOLUNTEERS IN AFRICA) INCORPORATED	INC9891627	POTORY-MINBEE ABORIGINAL ELDERS & SENIORS ASSOCIATION INCORPORATED	INC9880324
INDIAN CULTURAL & SPIRITUAL CENTRE INCORPORATED	INC9879684	QANTAS DIRECT SYDNEY SOCIAL CLUB INCORPORATED	INC9897156
INTERCP SYDNEY INCORPORATED	INC9887957	RESIDENTS OF KINCUMBER ASSOCIATION INCORPORATED	INC9882415
ISLAMIC HERITAGE ASSOCIATION OF AUSTRALIA INCORPORATED	INC9888186	RIVERINA FROG AND REPTILE SOCIETY INCORPORATED	INC9877607
KIDS IN COMMUNITY INCORPORATED	INC9878468	RIVERINA XR CLUB INCORPORATED	INC9885406
KTF COACHING ACADEMY INCORPORATED	INC9881966	ROCKY HALL PROGRESS ASSOCIATION INCORPORATED	INC9884543
KURRI WORKERS WOLVES ALL AGE SOCCER CLUB INCORPORATED	INC9882665	SANATAN AMAR JYOTI ASSOCIATION OF AUSTRALIA INCORPORATED	INC9874462
LITHGOW RADIO CONTROL CAR CLUB INCORPORATED	INC9877566	SAPPA BULGA LANDCARE INCORPORATED	Y2686200
MACLEAY VALLEY TENNIS ASSOCIATION INCORPORATED	INC9877352	SHANDILO PONY CLUB INCORPORATED	INC9879651
MANILLA JUNIOR CRICKET ASSOCIATION INC	Y1659846	SHREE GIRNARA SONI SAMAJ OF NSW INCORPORATED	Y2319920
MAORI N.O.W INCORPORATED	INC9882317	SOUTH SYDNEY GUJARATI SPORTS ASSOCIATION INCORPORATED	INC9885924
MARRICKVILLE TRANSPORT ACTION GROUP (MTAG) INCORPORATED	INC9885005	SOUTHERN CROSS MATHEMATICAL ASSOCIATION INCORPORATED	Y1261347
MDA DANCE TRAVEL CLUB INCORPORATED	Y2042944	SS & A BASKETBALL CLUB INCORPORATED	INC9882674
MIRANDA MAGPIES SPORTS CLUB INC	Y0352545	STH COAST SURF SISTAS INC	INC9880016
MOUNT OF OLIVES PENTECOSTAL CHURCH INC	INC9878999	STREET TORQUE PERFORMANCE CLUB INCORPORATED	INC9876695
MUSIC TALKS PEACE INCORPORATED	INC9886304		

SUPPORT GROUP FOR DEMOCRACY IN ETHIOPIA INCORPORATED	INC9881138
SYDNEY INNER WEST FUTSAL ASSOCIATION INCORPORATED	INC9897256
TAIWANESE LADIES DANCING GROUP INCORPORATED	INC9882176
TAMWORTH CHAPTER NO.206 ORDER OF THE EASTERN STAR INCORPORATED	INC9887260
THE HAWKESBURY RIVER ENVIRONMENT PROTECTION SOCIETY (THREPS) INC	Y0532543
THE INSTITUTE OF OVERSEAS KOREAN AFFAIRS (OCEANIA) INCORPORATED	INC9889619
THE JOY DIVISION INCORPORATED	INC9878709
THE KOREAN ASSOCIATION OF SCIENCE & TECHNOLOGY IN AUSTRALIA (KASTA) INCORPORATED	INC9883025
THE PRESENT TRUTH CHURCH INCORPORATED	INC9880935
THE SINGERS' END INCORPORATED	INC9885793
THE SOCIETY OF THE FRIENDS OF ST MARY'S CATHEDRAL CHOIR SYDNEY INCORPORATED	INC9885756
THE WORLD MILAL AUSTRALIA INCORPORATED	INC9888053
THE WORSHIP CENTRE YOUR CHURCH INCORPORATED	INC9888765
THIRRIWAY ABORIGINAL INCORPORATED	INC9888187
TINONEE JUNIOR CRICKET CLUB INCORPORATED	INC9879299
TORONTO PHYSICAL CULTURE CLUB INCORPORATED	INC9884027
TOUCH LIFE INCORPORATED	INC9888766
TRAILS ECOLOGY REGENERATION REGISTER AUSTRALIA INCORPORATED	INC9888122
TRANSARTS INCORPORATED	INC9888821
TWEED VALLEY THOROUGHbred OWNERS TRAINERS & CONNECTIONS ASSOCIATION INCORPORATED	INC9886012
UNITED PASTORS MOVEMENT INCORPORATED	INC9889258

VICTORY GLOBAL VISION ASSOCIATION INCORPORATED	INC9888561
VIRTUAL VOLUNTEERS INCORPORATED	INC9889643
VISIONS & DREAMS INCORPORATED	INC9888464
WAC FISHING CLUB INCORPORATED	INC9885436
WARRIGAL KOORI JUNIOR R.L.F.C INCORPORATED	INC9888958
WEE WAA COUNTRY EDUCATION GROUP INCORPORATED	INC9888126
WENTWORTH POLO CLUB INCORPORATED	Y0993202
WESTERN PLAINS CAT CLUB INCORPORATED	INC9875893
WESTERN SUBURBS DISTRICT ITF TAEKWON-DO INCORPORATED	INC9888477
WESTERN SYDNEY E-RECYCLERS INCORPORATED	INC9888052
WESTLAKES TOUCH FOOTBALL INCORPORATED	INC9888244
WINDSOR ELECTRIC RACING CLUB INCORPORATED	INC9888834
WINNING STREAK SUPPORT GROUP INCORPORATED	INC9878968
WORLD MISSION FUND INCORPORATED	INC9888453
YIROL COUNCIL OF CHURCHES IN AUSTRALIA INCORPORATED	INC9888396

Cancellation is effective as at the date of gazettal.

Dated this 8th day of April 2016

CHRISTINE GOWLAND
 Delegate of the Commissioner
 NSW Fair Trading

**DEPARTMENT OF FAMILY AND
 COMMUNITY SERVICES**

ERRATUM

The following notice replaces one published on page no 541 of the *Government Gazette* of 24 March 2016.

Revised Subpoena and Conduct Money Policy for the
 Department of Family and Community Services

As at April 2016

This Policy sets out the relevant information required to issue a subpoena on the Department of Family and Community Services (FACS), responsible Ministers or the Secretary.

If you require any further information, please contact FACS Legal as follows:

Subpoenas, FACS Legal Department of Family and Community Services
Email: subpoenas@FACS.nsw.gov.au
Or:
Ph: 02 9716 2310
Fax: 02 9716 2988
DX 21212 Ashfield
Post: Locked Bag 4028 Ashfield NSW 2131

Address for service – production of documents

Subpoenas for production of any of the Department's files (formerly addressed to the divisions of Housing NSW, Community Services, Ageing Disability and Home Care or NSW Businesslink) to be delivered for service, should be addressed to:

The Proper Officer
FACS Legal
Department of Family & Community Services
4–6 Cavill Avenue
Ashfield NSW 2131

Notice

Every subpoena should allow at least ten clear working days notice for compliance from the date of service.

Basic conduct money

Basic conduct money is \$100.00. This is to be paid upon service of subpoena and includes payment for the processing of up to 250 pages. No processing will occur until the conduct money is received.

Additional costs for compliance

- Additional processing charge (applicable where the number of pages exceeds 250) at a rate of \$0.25 per folio **plus**
- Additional costs (application on a case by case basis, where compliance is in response to an order for short service) **plus**
- Courier costs (applicable on a case by case basis, where compliance in a timely fashion requires the incurring of courier costs).

If you do not wish to pay the additional fees without consultation, please stipulate this in the letter accompanying the subpoena.

Subpoena to give evidence (where personal service on a departmental officer is required)

When this subpoena is served on a departmental officer in his or her capacity as an officer of FACS, neither FACS legal nor any other FACS office, will accept service of the subpoena. The rules relating to personal service apply. In addition:

- the ordinary salary of any staff member attending court and any additional expenses associated with her/his attendance may be required to be paid and
- any expenses involved in travel and accommodation of a staff member to attend court may also be required to be paid.

ALANA STARKE
General Counsel
FACS Legal

DISTRICT COURT ACT 1973

District Court of New South Wales

DIRECTION

Pursuant to section 173 of the *District Court Act 1973*, I direct that the District Court shall sit in its criminal jurisdiction at the place and time shown as follows:

Penrith 10am 27 June 2016 (2 weeks)

Dated this 4th day of April 2016

Justice D PRICE AM
Chief Judge

HEALTH ADMINISTRATION ACT 1982

LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991

Notice of Acquisition of Land by Compulsory Process for the Purposes of the Health Administration Act 1982

Pursuant to section 10 of the *Health Administration Act 1982* and section 19 (1) of the *Land Acquisition (Just Terms Compensation) Act 1991*, the Health Administration Corporation by its delegate declares, with the approval of the Governor, that the land described in the Schedule below is by this notice acquired by compulsory process for the purposes of the *Health Administration Act 1982*.

SAM SANGSTER

Chief Executive
Health Infrastructure

a duly authorised delegate of the Health Administration Corporation

Schedule

All those pieces or parcels of land situated in the Local Government Area of Gosford, Parish of Gosford and County of Northumberland, shown as:

Lot 31 Deposited Plan 1074996, said to be in the possession of Sharekouched Pty Ltd (registered proprietor) and Westpac Banking Corporation (mortgagee); and

Lot 32 Deposited Plan 1074996, said to be in the possession of Brocore Investments No 2 Pty Ltd (registered proprietor) and Westpac Banking Corporation (mortgagee).

Local
Government
Remuneration
Tribunal

Annual Report
and
Determination

*Annual report and determination under sections 239
and 241 of the Local Government Act 1993*

29 March
2016

Local Government Remuneration Tribunal

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Local Government Remuneration Tribunal

Section 1 Background

1. Pursuant to section 239 of the *Local Government Act 1993* (the LG Act) the Tribunal determines the categories of councils and mayoral offices and the allocation of each council and mayoral office into one of those categories.
2. Pursuant to section 241 of the LG Act the Tribunal determines in each category of council, the maximum and minimum amount of fees to be paid to mayors and councillors of councils, as well as chairpersons and members of county councils.
3. In determining the maximum and minimum fees payable to office holders in each of the categories, the Tribunal is required, pursuant to section 242A of the LG Act, to give effect to the same policies on increases in remuneration as those that the Industrial Relations Commission is required to give effect to under section 146C of the *Industrial Relations Act 1996* (IR Act), when making or varying awards or orders relating to the conditions of employment of public sector employees.
4. The current policy on wages pursuant to section 146(1)(a) of the IR Act is articulated in the *Industrial Relations (Public Sector Conditions of Employment) Regulation 2014* (the Regulation). The effect of the Regulation is that public sector wages cannot increase by more than 2.5 per cent, and this includes the maximum and minimum fees payable to councillors and mayors and chairpersons and members of county councils.
5. The Tribunal's Report and Determination of 2015 (the 2015 Determination) provided a general increase of 2.5 per cent which was consistent with the Government's policy on wages.

Section 2 Local Government Reform

Background

6. The NSW Government has been working with councils since 2011 to help strengthen local communities. The Tribunal's 2015 Determination outlined the Government's significant reforms, beginning with the *Destination 2036* summit in 2011 up to the

Local Government Remuneration Tribunal

release of the Fit for the Future initiative in 2014. At the date of the making of the 2015 Determination the status of the reforms was noted by the Tribunal as follows:

“Councils have been asked to assess their current position and submit a Fit for the Future proposal by 30 June 2015. The proposals will be assessed by an independent expert panel which will make recommendations to the Minister for Local Government. It is expected that from October 2015 Fit for the Future councils will commence the implementation of their proposals.

The Tribunal also notes that a new local government act is expected to be introduced following the local government elections in September 2016.”

Progress since the last determination

7. On 28 April 2015 the Minister for Local Government (the Minister) announced that the Independent Pricing and Regulatory Tribunal (IPART) would undertake the role of the Expert Panel in assessing councils’ Fit for the Future proposals. The Minister noted that the Terms of Reference for the Expert Panel were developed in consultation with Local Government NSW, Local Government Professionals Australia and the United Services Union.
8. The NSW Government released IPART’s *Assessment of Council Fit for the Future Proposals* report on 16 October 2015. The IPART report found that nearly two-thirds of NSW councils are not fit for the future and found that savings of up to \$2 billion could be achieved through council mergers. Funding will be available for council mergers that are supported by merging partners and supported by the Government through a Stronger Communities Fund.
9. On 6 January 2016, the Minister for Local Government announced 35 proposals for council mergers. If approved, those proposals would reduce the number of councils in Greater Sydney from 43 to 25 and the number of regional councils from 109 to 87. The Minister referred those proposals to the Chief Executive of the Office of Local Government for examination and report under the LG Act. The Chief Executive delegated this function to a number of people (Delegates). The Delegates are required to report on the proposals against the factors in section 263(3) of the LG Act, having

Local Government Remuneration Tribunal

regard to written submissions and comments raised in public meetings. The Minister will consider the Delegates' reports and the comments of the Local Government Boundaries Commission on the Delegates' reports before determining the outcome of merger proposals. It is expected that the outcomes of the proposal examination and reporting processes will be known by around mid-2016.

10. In respect to the amendments to the LG Act, on 8 January 2016 the NSW Government announced the commencement of the first phase :

"...Consultation on phase 1 amendments to the Local Government Act 1993 has commenced. The proposed amendments will:

- clarify roles and responsibilities of councillors, mayors, administrators and general managers;*
- introduce new guiding principles for local government;*
- improve governance of councils and professional development for councillors;*
- expand on the framework for strategic business planning and reporting;*
- prioritise community engagement and financial accountability; and streamline council administrative processes, including in relation to delegations and community grants.*

While the fundamentals of the Local Government Act 1993 remain sound, both the Independent Local Government Review Panel and Local Government Acts Taskforce recommended changes to modernise the legislation and to ensure it meets the future needs of councils and communities.

Phase 1 of the reform program focuses mainly on changes to the governance and strategic business planning processes of councils. Phase 2 will focus on the way in which councils raise revenue and exercise their regulatory functions." (Source: Circular to Councils - No 16-01)

Local Government Remuneration Tribunal

Section 3 2016 Review

11. It is not expected that a decision on, or implementation of structural or legislative reforms to local government will be finalised prior to the Tribunal making its determination on or before 30 April 2016.
12. On that basis, and given the limitations placed on the Tribunal in respect of determining increases in fees, mayors were advised on 20 January 2016 that general submissions from individual councils were not required for the 2016 review.
13. The Tribunal did however seek a submission from Local Government NSW (LGNSW) and subsequently met with the President and Chief Executive of LGNSW. The Tribunal wishes to place on record its appreciation to the President and Chief Executive for meeting with the Tribunal.

LGNSW Submission

14. The association's submission highlighted the areas of reform in local government in NSW and is of the view that the anticipated changes flowing from the reforms warrant, and provide the opportunity to introduce, a new remuneration structure that properly reflects the diverse and evolving roles of mayors and councillors. The association would like to commence a review of the remuneration structure as soon as possible.
15. Given the statutory limitations in place LGNSW has also requested that councillor and mayoral fees be increased by the full 2.5 percent for 2016/17. LGNSW continues to assert that councillor and mayoral fees should increase on the basis of a number of factors, including cost of living pressures, ongoing increase in workload and responsibilities and additional tasks relating to implementing the Government's reform process.

Tribunal's Findings

16. The Tribunal notes that the Government's significant program of local government reform, including proposed changes to the LG Act, is aimed at creating stronger councils and improving performance and governance of local councils. The Tribunal continues to

Local Government Remuneration Tribunal

support initiatives which will bring about improvements in the local government sector, in that those reforms should result in greater structural efficiencies and should contribute to the long term viability of local government in NSW.

Categorisation

17. The Tribunal notes that the process for determining merger proposals and creation of new councils, if any, is expected to be finalised in mid-2016, with consequent implications for categorisation of councils for the purposes of determining fees. If required the Minister may direct the Tribunal to make special determination(s) in accordance with s. 242 of the LG Act.
18. The Tribunal is still of the view that significant changes to the structure of councils should prompt a revision of the criteria for determining categories and fees as noted in the 2015 Determination:

“Any new categorisation model may need to have regard to a broader or different set of criteria than those currently provided for in section 240 of the LG Act.

In reviewing the LG Act the Government may wish to consider the range of factors any future Tribunal should have regard to in determining categories. As one example, the Government has released “A Plan for Growing Sydney” that will guide land use planning decisions in Metropolitan Sydney for the next 20 years. The Greater Sydney Commission will work with local councils to implement growth and infrastructure plans. The expertise and work load expected of councillors and mayors with responsibilities associated with “A Plan for Growing Sydney” may be factors which the Tribunal should have regard to in determining categorisation and remuneration. The Tribunal expects that similar pressures will be placed on rural and regional councils to drive economic and social growth throughout NSW.

The Tribunal also notes that any revision to the fees as a result of any new categorisation model would need to balance the need to attract and retain experienced and capable elected representatives with the ability of councils to afford any potential increases. While money is not the primary motivator for

Local Government Remuneration Tribunal

undertaking public office, fees should adequately recognise the roles and responsibilities of councillors and mayors and assist in attracting suitably qualified and experienced candidates."

2016 Increase

19. The Tribunal is required to have regard to the Government's wages policy when determining the increase to apply to the maximum and minimum fees that apply to the councillors and mayors. The public sector wages policy currently provides for a cap on increases of 2.5 per cent.
20. The Tribunal has reviewed the key economic indicators, including the Consumer Price Index and Wage Price Index, and finds that the full increase of 2.5 per cent available to it is warranted. On that basis, and after taking the views of the Assessors into account, the Tribunal considers that an increase of 2.5 per cent in the maximum and minimum fee for each category of councillor and mayoral office, including county councils, is appropriate and so determines.
21. The Tribunal notes that in the Fit for the Future *Progress Report – Stronger Councils, Stronger Communities* the Government has identified a number of strategies to strengthen local leadership. These include a review of councillor remuneration during 2016. In undertaking this review the Government may wish to consider the impact of the Government's wages policy on increases in mayoral and councillor fees and the limitations this may impose on any future remuneration model.

The Local Government Remuneration Tribunal

Signed

Dr Robert Lang

Dated: 29 March 2016

Local Government Remuneration Tribunal

Section 4 Determinations

**Determination No. 1- Determination Pursuant to Section 239 of
Categories of Councils and County Councils Effective From 1 July 2016**

Table 1: General Purpose Councils

Table 1: General Purpose Councils (152)		
Category	Council	
Principal City (1)	Sydney	
Major City (3)	Newcastle Parramatta Wollongong	
Metropolitan Major (2)	Blacktown Penrith	
Metropolitan Centre (16)	Bankstown Campbelltown Fairfield Gosford The Hills Hornsby Hurstville Lake Macquarie	Liverpool North Sydney Randwick Ryde Sutherland Warringah Willoughby Wyong
Metropolitan (21)	Ashfield Auburn Botany Burwood Camden Canada Bay Canterbury Holroyd Hunters Hill Kogarah Ku-ring-gai	Lane Cove Leichhardt Manly Marrickville Mosman Pittwater Rockdale Strathfield Waverley Woollahra

Local Government Remuneration Tribunal

Table 1: General Purpose Councils (152)			
Category	Council		
Country Rural (32)	Albury Armidale Dumaresq Ballina Bathurst Bega Valley Blue Mountains Broken Hill Byron Cessnock Clarence Valley Coffs Harbour Dubbo Eurobodalla Great Lakes Goulburn Mulwaree Queanbeyan	Greater Taree Griffith Hawkesbury Kempsey Lismore Maitland Orange Port Macquarie-Hastings Port Stephens Shellharbour Shoalhaven Tamworth Tweed Wagga Wagga Wingecarribee Wollondilly	
Rural (77)	Balranald Bellingen Berrigan Bland Blayney Bogan Bombala Boorowa Bourke Brewarrina Cabonne Carrathool Central Darling Cobar Conargo Coolamon Cooma-Monaro Coonamble Cootamundra Corowa Cowra Deniliquin Dungog Forbes Gilgandra Glen Innes Severn	Gloucester Greater Hume Gundagai Gunnedah Guyra Gwydir Harden Hay Inverell Jerilderie Junee Kiama Kyogle Lachlan Leeton Lithgow Liverpool Plains Lockhart Mid-Western Moree Plains Murray Murrumbidgee Muswellbrook Nambucca Narrabri Narrandera	Narromine Palerang Parkes Oberon Richmond Valley Singleton Snowy River Temora Tenterfield Tumbarumba Tumut Upper Hunter Upper Lachlan Uralla Urana Wakool Walcha Walgett Warren Warrumbungle Weddin Wellington Wentworth Yass Valley Young

Local Government Remuneration Tribunal

Table 2: County Councils

Table 2: County Councils (14)	
Category	Council
Water (5)	Central Tablelands Goldenfields Water MidCoast Riverina Water Rous
Other (9)	Castlereagh – Macquarie Central Murray Far North Coast Hawkesbury River New England Tablelands Richmond River Southern Slopes Upper Hunter Upper Macquarie

Local Government Remuneration Tribunal

Determination No. 2- Determination Pursuant to Section 241 of Fees for Councillors and Mayors

Pursuant to s.241 of the Local Government Act 1993, the annual fees to be paid in each of the categories to Councillors, Mayors, Members and Chairpersons of County Councils effective on and from 1 July 2016 are determined as follows:

Table 3: Fees for General Purpose and County Councils

Table 3: Fees for General Purpose and County Councils				
Category	Councillor/Member Annual Fee		Mayor/Chairperson Additional Fee	
	Minimum	Maximum	Minimum	Maximum
General Purpose Councils				
Principal City	25,670	37,640	157,030	206,620
Major City	17,110	28,240	36,360	82,270
Metropolitan Major	17,110	28,240	36,360	82,270
Metropolitan Centre	12,830	23,950	27,260	63,640
Metropolitan	8,540	18,840	18,180	41,090
Regional Rural	8,540	18,840	18,180	41,090
Rural	8,540	11,290	9,080	24,630
County Councils				
Water	1,700	9,410	3,640	15,460
Other	1,700	5,630	3,640	10,270

*This fee must be paid in addition to the fee paid to the Mayor/Chairperson as a Councillor/Member (s.249(2)).

The Local Government Remuneration Tribunal

Signed

Dr Robert Lang

Dated: 29 March 2016

PUBLIC LOTTERIES ACT 1996

Instant Lotteries – Approval of Rules

I, The Honourable Troy Wayne Grant MP, Deputy Premier and Minister for Racing, under section 23 (1) of the *Public Lotteries Act 1996*, DO HEREBY APPROVE the rules annexed to this instrument for the conduct of Games of Instant Lotteries and Games of Promotional Instant Lotteries by the New South Wales Lotteries Corporation Pty Ltd.

This approval takes effect on and from the date of gazettal.

Dated this 30th day of March 2016

The Honourable TROY GRANT, MP
Deputy Premier
Minister for Justice and Police
Minister for the Arts
Minister for Racing

PUBLIC LOTTERIES ACT 1996

INSTANT LOTTERIES RULES

It is hereby notified that the Minister administering the Public Lotteries Act 1996, has approved of the following Rules for the Conduct of Instant Lottery and Promotional Instant Lotteries. In accordance with Section 23(3)(a) of the Act, these Rules take effect on and from 8 April 2016. These Rules supersede the Rules notified previously in the *NSW Government Gazette*.

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RULE 1 DEFINITIONS

- (a) In these Rules unless inconsistent with the context:
- (i) "Act" means the Public Lotteries Act 1996, any amendment, modification, variation, or abrogation thereof for the time being in force;
 - (ii) "Ancillary Fee" means a fee which the Chief Executive Officer of the Licensee may from time to time authorise a Reseller to charge a Player from whom a Reseller accepts a subscription;
 - (iii) "Approved" means approved in writing by the Minister;
 - (iv) "Chief Executive Officer" means the Chief Executive Officer of the Licensee or such delegate appointed by the Chief Executive Officer pursuant to Rule 3(g);
 - (v) "Commission" means an amount:
 - (1) paid to, deducted by or retained by a Retailer in connection with a Subscription (whether or not in the person's capacity as a Retailer); and
 - (2) determined by or in accordance with, and identified as Commission in, the conditions of the Product Licence or these Rules;
 - (vi) "Computer Linked Terminal" means the computer equipment located in branches of the Licensee or its related bodies corporate, or places of business of its Retailers or otherwise which is linked to the central processing computer equipment of the Licensee for purposes associated with Instant Lotteries and Promotional Instant Lotteries, including determining whether a Prize has been won;
 - (vii) "Computer Records" means the sum of information, including Ticket Number information, which is held by the Licensee by way of or through the Licensee's central processing computer equipment in respect of an Instant Lottery or a Promotional Instant Lottery and which is retained or recorded on a magnetic tape or otherwise stored;
 - (viii) "Conduct" in relation to an Instant Lottery and Promotional Instant Lottery has the same meaning as assigned to it by Section 4(1) of the Act;
 - (ix) "Director" means a Director of the Board of Directors of the Licensee;
 - (x) "Draw" means the drawing of a public lottery conducted as part of an Instant Lottery or Promotional Instant Lottery in accordance with Rule 7(q);
 - (xi) "Employee" means an employee of the Licensee. In other contexts where appropriate, "Employee" includes an employee of a Retailer;
 - (xii) "Instant Lottery" means a public lottery Conducted pursuant to the Act, the Operator Licence, the Product Licence, Rules and Regulations whereby Prizes

are determined (wholly or partly) by revealing Numbers on Tickets in the lottery (whether or not additional Prizes are determined in any other manner) but does not include Promotional Instant Lotteries;

- (xiii) "Licensee" means New South Wales Lotteries Corporation Pty Limited;
- (xiv) "Minister" means the Minister for the time being administering the Act;
- (xv) "Numbers" has the same meaning as contained in Section 5 of the Act;
- (xvi) "Operator Licence" means the operator licence granted to the Licensee, pursuant to the Act, to conduct any public lottery for which it, from time to time, holds a Product Licence granted pursuant to the Act;
- (xvii) "Outlet" means a place at which the Licensee or a Retailer is allowed to:
 - (1) receive Subscriptions for and sell Tickets in an Instant Lottery;
 - (2) receive entries in a Promotional Instant Lottery and provide Promotional Instant Lottery Tickets; and
 - (3) in the case of a Reseller receive Subscriptions and instructions to purchase Instant Lottery Tickets and to provide Promotional Instant Lottery Tickets on behalf of Players;
- (xviii) "Player" means a person who:
 - (1) has paid the correct Subscription and Commission for a valid Instant Lottery Ticket; and/or
 - (2) holds a valid Ticket; and/or
 - (3) holds, bears and submits a valid Ticket to the Licensee and/or a Retailer for the purposes of receiving a Prize; andincludes where relevant a person who has validly entered a Promotional Instant Lottery and who holds, bears and submits a Ticket in the Promotional Instant Lottery to the Licensee or a Retailer for the purposes of receiving a Prize;
- (xix) "Prize" means any prize determined in accordance with Rule 7;
- (xx) "Prize Allocation" shall be determined by the Licensee and has the meaning provided in Rule 7 (b);
- (xxi) "Prize Fund" means the account established under Section 27 of the Act and known as the Instant Lottery Prize Fund Account;
- (xxii) "Prize Pool" is the proportion of Subscriptions paid into the Prize Fund for a particular Instant Lottery and has the meaning specified in Rule 7(a).

- (xxiii) "Prize Reserve Fund" means the fund located in the Prize Fund under Section 27 of the Act containing
- (1) the amounts specified in Rule 7(c);
 - (2) an amount representing any unclaimed Prizes, subject to a direction under Section 27A of the Act.
- (xxiv) "Product Licence" means the product licence granted to the Licensee to Conduct Instant Lotteries and Promotional Instant Lotteries pursuant to Section 12 of the Act;
- (xxv) "Promotional Instant Lottery" means a public lottery Conducted for the purpose of promoting an Instant Lottery, and in respect of which:
- (1) eligibility to enter is confined to Players in an Instant Lottery which is currently selling or in which selling has concluded; and
 - (2) no further Subscription or Commission is charged;
- (xxvi) "Regulation" means a regulation made under the Act;
- (xxvii) "Reseller" means a Retailer, approved by the Minister, who is authorised by the Licensee to receive Subscriptions, Commissions and instructions in respect of an Instant Lottery and instructions with respect to a Promotional Instant Lottery from a Player. Such Reseller may receive instructions by post, telephone, facsimile or modem (internet) and such Reseller may receive Prizes for and on behalf on a Player;
- (xxviii) "Retailer" means a person or agent appointed or approved by the Licensee for purposes associated with Instant Lottery and Promotional Instant Lottery Conducted by the Licensee and includes a Reseller;
- (xxix) "Rules" means these Rules made under the Act any amendment, modification, variation, or abrogation thereof for the time being in force;
- (xxx) "Selling Fee" means the sum of the Commission and Subscription and Ancillary Fee (where applicable);
- (xxxi) "Subscription" means the amounts paid for Tickets but does not include the following:
- (1) Ancillary Fees; or
 - (2) Commission, unless the Act expressly provides otherwise;
- (xxxii) "Ticket" means the form of entry to an Instant Lottery or Promotional Instant Lottery, whether it be in documentary or other approved form, as agreed by the Chief Executive Officer, which permits a Player to play an Instant Lottery or Promotional Instant Lottery and which evidences:

- (1) in the case of an Instant Lottery, that the correct Selling Fee has been paid to enter the Instant Lottery; and
- (2) in the case of a Promotional Instant Lottery, that a Player has validly entered the Promotional Instant Lottery;

and which may be validated by a Computer Linked Terminal and which may include a Ticket Number and such other tests to determine the validity of the Ticket and whether it has won a Prize;

(xxxiii) "Ticket Number" means the verification code in the form of numbers and/or letters and/or bar codes which may be printed on Tickets and which constitute the means by which the Licensee can determine after the issue of the Ticket whether it is a valid Ticket and also whether it has won a Prize;

(b) In these Rules unless inconsistent with the context:

- (i) a reference to the singular shall include the plural, and vice versa;
- (ii) headings are for convenient reference only and have no effect in limiting or extending the language of the provisions to which they refer.

RULE 2 CONDUCT OF INSTANT LOTTERIES AND PROMOTIONAL INSTANT LOTTERIES

- (a) These Rules are to be read subject to the Act, its Regulations, the Operator Licence and the Product Licence and shall apply to every Instant Lottery and Promotional Instant Lottery.
- (b) All decisions made by the Chief Executive Officer concerning the Prize Fund and the declaration and payment of Prizes shall be final and binding on all Players.
- (c) An Instant Lottery or Promotional Instant Lottery shall, at its commencement, have a Prize structure as determined by the Chief Executive Officer.
- (d) The Prize structure shall comprise the number and value of Prizes to be offered by the Licensee to Players during the period of each Instant Lottery or Promotional Instant Lottery, as the case may be.
- (e) During the period in which the Licensee:
 - (i) offers for sale Tickets in an Instant Lottery; or
 - (ii) accepts entries in a Promotional Instant Lottery;some or all of the Prizes in the approved Prize structure may already have been won when a Player:
 - (iii) purchases a Ticket in an Instant Lottery; or
 - (iv) enters a Promotional Instant Lottery;leaving the balance of Prizes still available to be won by Players, or no Prizes, as the case may be, at the time of their respective purchase or entry.
- (f) There shall be no obligation or liability imposed upon the Licensee whatsoever to advise or otherwise inform prospective Players in an Instant Lottery or Promotional Instant Lottery of the number or nature of Prizes still available, or if any Prizes are still available, to be won by them at the time of their proposed purchase of a Ticket in an Instant Lottery or entry in a Promotional Instant Lottery, as the case may be.
- (g) A Ticket in an Instant Lottery may include a Promotional Instant Lottery on the same Ticket.
- (h) A Ticket in an Instant Lottery or Promotional Instant Lottery may include one or more Prizes to be won on the same Ticket.
- (i) An Instant Lottery or Promotional Instant Lottery may require the Player to reveal a winning Number on more than one Ticket in order to win a Prize.
- (j) The Licensee may Conduct a Promotional Instant Lottery in such manner and at such times and places as the Licensee determines.

- (k) A Promotional Instant Lottery may be Conducted in conjunction with an Instant Lottery or separately from an Instant Lottery.

RULE 3 APPLICATION OF RULES

- (a) These Rules and all instructions and conditions printed on Tickets shall apply to each Instant Lottery or Promotional Instant Lottery and shall be binding on all Players.
- (b) In the event of any inconsistency between these Rules and the instructions and conditions printed on Tickets or promotional materials, these Rules shall prevail to the extent of the inconsistency.
- (c) These Rules shall apply to each Promotional Instant Lottery and shall be binding on all Players.
- (d) By entering an Instant Lottery or Promotional Instant Lottery Players agree to be bound by these Rules and to accept as final and binding on them all decisions made by the Chief Executive Officer.
- (e) The Rules that are in force at the time of purchase of a Ticket in an Instant Lottery or a Promotional Instant Lottery are contractually binding on the Licensee and the Player.
- (f) A Retailer, including a Reseller, has no authority to bind the Licensee in contract or otherwise.
- (g) The Chief Executive Officer may appoint a delegate to perform a function under these Rules which function would otherwise be required to be performed by the Chief Executive Officer. Such appointment shall be on such terms and conditions as the Chief Executive Officer may determine.
- (h) Any reference to the Chief Executive Officer in these Rules shall include a reference to a duly authorised delegate of the Chief Executive Officer under Rule 3(g).
- (i) These Rules will be displayed and made available for inspection at each Outlet.

RULE 4 RULES APPLYING TO TICKETS

- (a) The Ticket issued to the Player shall constitute the Player's official receipt and acceptance thereof shall constitute the Player's acknowledgment of all details thereon and shall be the only form issued by the Licensee or its Retailer to the Player evidencing the Player's entry in a particular Instant Lottery or Promotional Instant Lottery.
- (b) Neither the Licensee nor a Retailer shall be liable to a Player in the event of the destruction, loss, theft or mutilation of a Ticket issued to a Player. It shall be the sole responsibility of the Player to ensure the safe custody of a Ticket issued to the Player.
- (c) In the event that the particulars recorded on the Player's Ticket are not consistent with the particulars held by the Licensee by way of Computer Records or such other records held by the Licensee or otherwise available to the Licensee from its authorised contractor, then the latter mentioned particulars and records shall apply and shall determine what Prize, if any, the Player shall be entitled to and the Player shall be bound by any such determination. Particulars which may be recorded on a Ticket include the Ticket Number and other security and/or prize validation related information, the Numbers to be revealed and information regarding the particular Instant Lottery or Promotional Instant Lottery entered as well as the details of the particular book and ticket number.
- (d) A Ticket shall at all times remain the property of the Licensee and a Player shall deliver up any Ticket to the Licensee upon demand.
- (e) A Player in an Instant Lottery may indicate anonymity is desired by clearly stating so on the Prize claim form they submit in relation to a Prize (in circumstances when a Prize claim form is applicable for the Prize). Players who subsequently desire anonymity should apply in writing to the Chief Executive Officer and if in the opinion of the Chief Executive Officer sufficient time is available to prevent any publication then the Chief Executive Officer may grant such application and withhold publication.
- (f) The identity of a Player who has requested anonymity in the manner referred to in Rule 4(e) must not be published by the Licensee, unless sufficient time has not been provided by the Player in the case of a subsequent request.
- (g) A Player may at any time revoke a request for anonymity and participate in any promotion or marketing activity requested by the Licensee.
- (h) Where a Player submits a Ticket as trustee, representative or nominee for another person or persons, the Licensee will be taken to have no knowledge, nor to be on notice whether actual or constructive, of any such arrangement and the transaction will be conducted solely with the Player.
- (i) A Ticket in an Instant Lottery shall contain instructions specifying:
 - (i) the manner in which the Ticket holder may determine whether an Instant Lottery Prize has been won; and
 - (ii) the procedures for claiming an Instant Lottery Prize.

- (j) Subject to Rule 7 the Chief Executive Officer may pay a Prize to a person who holds, bears or submits a Ticket in an Instant Lottery or a Ticket in a Promotional Instant Lottery to the Licensee or a Retailer for the purpose of receiving a Prize if the Chief Executive Officer is satisfied that the Ticket Number and/or other security tests as the Chief Executive Officer thinks necessary show that the Ticket is a valid Ticket and has won a Prize.

RULE 5 PRICE OF TICKETS, COMMISSION AND ANCILLARY FEE

- (a) The Licensee shall set, as approved, the amount payable by Players, excluding Commission, in respect of the sale of Tickets in an Instant Lottery.
- (b) The Licensee shall set, as approved, the Commission payable to Retailers in respect of the sale of Tickets in an Instant Lottery.
- (c) The Commission payable to any Retailer is not to exceed the amount set under Schedule 1, and does not include any Ancillary Fees charged by a Reseller.
- (d) A Reseller may charge an Ancillary Fee as authorised by the Chief Executive Officer from time to time.

RULE 6 SALE OF INSTANT LOTTERY TICKETS AND ENTRIES IN PROMOTIONAL INSTANT LOTTERIES

- (a) The sale of a Ticket in an Instant Lottery shall not be considered to have been made until the Selling Fee has been paid in respect of that Ticket.
- (b) A person under the age of eighteen (18) years is not permitted to purchase a Ticket in an Instant Lottery or a Promotional Instant Lottery.
- (c) A Ticket in an Instant Lottery may only be sold by the Licensee or through a Retailer.
- (d) A Reseller may receive instructions by post, telephone, facsimile or modem (internet) and such Reseller may receive Prize cheques for and on behalf of Players.
- (e) The Chief Executive Officer is to determine the form of entries in a Promotional Instant Lottery that will be used by the Licensee in determining whether one or more Prizes have been won in the Promotional Instant Lottery.
- (f) Without limiting Rule 6(e), the Chief Executive Officer may determine that entries in a Promotional Instant Lottery are to be in the form of any of the following (or combination of the following):
 - (i) portions of a Ticket in an Instant Lottery nominated by the Chief Executive Officer;
 - (ii) any other Ticket or document;
 - (iii) entries made by means of an electronic or mechanical device or by a telecommunications system.
- (g) If an entry in a Promotional Instant Lottery is to consist of a portion of an Instant Lottery Ticket:
 - (i) the manner in which each game is to be played is to be clearly displayed on separate portions of each Ticket; and
 - (ii) the play areas of the Instant Lottery and Promotional Instant Lottery are to be displayed on separate portions of each Ticket.
- (h) If an entry in a Promotional Instant Lottery is to consist of a Ticket or document, a Ticket or document issued to an entrant in the Promotional Instant Lottery:
 - (i) constitutes the Player's official receipt;
 - (ii) is, following its acceptance, to constitute the Player's acknowledgment of the details on the entry; and
 - (iii) is to be the only document issued by the Licensee, its Retailers to the entrant evidencing the processing of an entry in the Promotional Instant Lottery.

RULE 7 PRIZES

- (a) The Prize Pool in an Instant Lottery shall be not less than fifty five percent (55%) and not more than sixty five point two two six percent (65.22%) of Subscriptions.
- (b) The Prize Allocation in a particular Instant Lottery shall comprise:
 - (i) the Prizes in the Instant Lottery;
 - (ii) the number of Tickets in the Instant Lottery; and
 - (iii) the cost of Prizes, which shall be not less than fifty five percent (55%) of Subscriptions, and which shall be funded in whole or in part from the Prize Pool.
- (c) Where the cost of Prizes in an Instant Lottery is less than sixty five point two two percent (65.22%) of Subscriptions, that amount representing the difference between that cost and sixty five point two two percent (65.22%) shall be retained in the Prize Reserve Fund.
- (d) Where the cost of Prizes in an Instant Lottery would otherwise exceed sixty five point two two percent (65.22%) of Subscriptions, the amount representing the difference between that cost and sixty five point two two percent (65.22%) of Subscriptions shall be drawn from the Prize Reserve Fund.
- (e) The Prizes payable in respect of an Instant Lottery are to be determined:
 - (i) by revealing the Number on the Tickets in the lottery; or
 - (ii) in such other manner as is approved by the Chief Executive Officer for the purposes of the particular Instant Lottery.
- (f) Without limiting Rule 7(e), Prizes in an Instant Lottery may be determined by the inclusion of Tickets in the lottery in a draw.
- (g) If any Prizes in an Instant Lottery are to be determined in a manner approved under Rule 7(e)(ii), the Licensee is to give notice of the manner of determination:
 - (i) by indicating the manner of determining the Prize on each Ticket in the Instant Lottery; or
 - (ii) by publicly advertising the manner of determination of the Prize, or both.
- (h) The Prizes payable in an Instant Lottery are to consist of one or more of the following:
 - (i) money;
 - (ii) Tickets in an Instant lottery;
 - (iii) Tickets in any other lottery;

- (iv) such other prizes as may (subject to this clause) be determined by the Licensee.
- (i) The Chief Executive Officer may change or alter the nature of any Prize offered in an Instant Lottery, including the conversion of any Prize (or part of a Prize) into a monetary equivalent.
- (j) A Prize in an Instant Lottery or a Promotional Instant Lottery must not consist of or include tobacco.
- (k) A Prize in an Instant Lottery or a Promotional Instant Lottery must not consist of or include liquor within the meaning of the Liquor Act 2007.
- (l) The Prizes payable in a Promotional Instant Lottery may consist of one or more of the following:
 - (i) money;
 - (ii) holidays;
 - (iii) travel;
 - (iv) accommodation;
 - (v) services or goods provided by the Licensee or by persons or bodies other than the Licensee, whether or not for valuable consideration; and
 - (vi) such other Prizes as may (subject to this clause) be determined by the Chief Executive Officer.
- (m) The Chief Executive Officer is to determine the number, nature and value of Prizes in each Promotional Instant Lottery.
- (n) The Licensee is to publicly advertise or otherwise promote the nature and value of, and the conditions relating to payment of, Prizes, and where practical the number of Prizes, in each Promotional Instant Lottery Conducted by it.
- (o) The Chief Executive Officer may change or alter the nature of any Prize offered in a Promotional Instant Lottery, including (but not limited to) the following:
 - (i) the replacement of any holiday destination offered as a Prize or part of a Prize with another holiday destination;
 - (ii) the replacement of any mode of travel offered as a Prize or part of a Prize with another mode of travel;
 - (iii) the replacement of any form of accommodation offered as a Prize or part of a Prize with another form of accommodation;
 - (iv) the resupply of services or the replacement of goods provided by the Licensee or by persons or bodies other than the Licensee; and

- (v) the conversion of any Prize (or part of a Prize) provided by the Licensee or by another person or body into a money equivalent.
- (p) The Prizes in a Promotional Instant Lottery are payable in such manner as is approved by the Chief Executive Officer for the purposes of that Promotional Instant Lottery.
- (q) Drawing for Instant Lottery Prizes

This Rule applies when the Licensee determines that some of the Prizes in an Instant Lottery are to be determined by a Draw:

- (i) A Ticket in an Instant Lottery is eligible to be included in a Draw in such circumstances as may be indicated or publicly advertised in accordance with Rule 7(g)(ii).
- (ii) A Draw is to be conducted at such times and in such manner as the Licensee may determine.
- (iii) Prize winners in a Draw are to be selected at random by such means (including the use of mechanical, electronic or other devices or aids) as the Minister may approve.
- (iv) A Draw is to be carried out under the control and direction of the Licensee.
- (v) The Licensee is, as far as is reasonably practicable, to ensure the security, performance and accuracy of any device or aid used in connection with a Draw.
- (vi) Each draw in an Instant Lottery is to be open to the public.
- (vii) The Licensee is, if possible, to notify Prize winners in a Draw that they have won a Prize and may require them to claim the Prize before payment of the Prize.

RULE 8 PROCEDURES FOR CLAIMING AND PAYMENT OF PRIZES

- (a) A Prize in an Instant Lottery is payable only on presentation of a Ticket in that Instant Lottery indicating that the Prize has been won and after the Licensee is satisfied that the Ticket Number and/or other security tests as the Licensee deems necessary show that the Ticket is valid and has won the Prize.

- (b) A Prize is not payable in a Promotional Instant Lottery unless:
 - (i) the entry submitted in the Promotional Instant Lottery is in the form determined by the Chief Executive Officer under Rule 6; and
 - (ii) if the form of entry requires the Player to have purchased a Ticket in an Instant Lottery, the Ticket satisfies any test used by the Chief Executive Officer to determine whether the Ticket is valid,and the claimant has complied with all conditions relating to the Promotional Instant Lottery advertised under Rule 7(n).

- (c) The Licensee may record on a Ticket in a Promotional Instant Lottery a verification code or other test and use it to determine whether the Ticket in a Promotional Instant Lottery is a valid entry and whether it has won a Prize. A Prize is only payable in respect of a Ticket in a Promotional Instant Lottery if such verification code or other test shows that the Ticket is valid and has won a Prize.

- (d) The Chief Executive Officer shall from time to time approve the form and content of the Prize claim form to be forwarded by Players when claiming a Prize in an Instant Lottery or Promotional Instant Lottery.

- (e) A Prize exceeding \$1,000.00 must be claimed by lodgement with the Licensee of a Prize claim form containing or accompanied by the like particulars set out in the claim form and any other evidence that the Chief Executive Officer may from time to time require.

- (f) A Prize not exceeding \$1,000.00 (or up to a Retailer's payment limit as formally authorised in writing by the Licensee) shown on a Computer Linked Terminal will be paid to a Player, upon surrender of the winning Ticket and subject to Rule 8(a), by a Retailer with a Computer Linked Terminal.

- (g) A Prize not paid by a Retailer in accordance with Rule 8(f) will be paid by the Licensee by cheque, or at the discretion of the Licensee by electronic funds transfer, upon the submission to the Licensee of a Prize claim form, the Prize winning Ticket and such other evidence as the Chief Executive Officer may from time to time require.

- (h) Any cheque drawn in payment of a Prize:
 - (i) must be made payable to the order of one named Prize winner as shown on the Prize winning Ticket or otherwise indicated on a Prize claim form on submission of the Prize winning Ticket; and
 - (ii) must be crossed and marked "not negotiable".

- (i) A Player who claims to be entitled to a Prize and whose Ticket is not shown as a winner by the Ticket Number and/or such other security test deemed necessary by the Chief Executive Officer must lodge a Prize claim form containing or accompanied by the particulars required on the claim form.
- (j) The payment of Prizes to Players who are known to have died before receiving any or all of a particular Prize shall be made in accordance with the laws of New South Wales.
- (k) Subject to Section 27 of the Act, all unclaimed or uncollected Prizes shall be retained in the Prize Fund for payment to the Players or entitled thereto.
- (l) Where payment of a Prize is made by cheque and mailed, it shall be posted to the name and address shown on the Prize claim form. Thereafter, the Licensee shall not be held liable for any loss, delay in the delivery thereof or any negotiation of such cheque. A certificate under the hand of the Chief Executive Officer verifying the date of posting shall be conclusive evidence of same.
- (m) A Prize may be claimed through a Retailer, the Licensee or by mail direct to:

*The Chief Executive Officer
New South Wales Lotteries
PO Box 6687
Silverwater NSW 2128*

or such other address as may be publicly notified from time to time by the Chief Executive Officer. A Prize claim form for a Prize must be forwarded by the Player to the Licensee direct.

- (n) Where more than one name is advised on a Ticket or on a Prize claim form, payment to any one person so named at the address so given shall discharge the Licensee from all liability in respect of such payment to the other person so named.
- (o) The payment of all Prizes pursuant to this Rule 8 will discharge the Licensee from liability notwithstanding the existence of any trust whether express, constructive or implied. Where the Licensee has paid a Player pursuant to this Rule 8 and the Chief Executive Officer is, after such payment has been made, of the view that:
 - (i) the Player was not the Player to whom such payment should have been made; or
 - (ii) a Prize is not payable to the Playerthe Player shall upon being requested to do so by the Licensee in writing refund to the Licensee the monies forwarded to him or her.
- (p) The Licensee shall be entitled, in its absolute discretion, to recognise the person who holds, bears and submits a Ticket as the Prize winner.
- (q) The Licensee accepts no responsibility or liability for lost or stolen Tickets.

RULE 9 IDENTITY

The Licensee may require a claimant for a Prize in an Instant Lottery or Promotional Instant Lottery:

- (a) to furnish such evidence of the claimant's identity as the Licensee thinks sufficient to establish the claimant's identity; and
- (b) to verify that evidence in such manner as the Licensee considers appropriate.

RULE 10 EFFECT OF PAYMENT

- (a) The Licensee need not inquire into the entitlement to claim a Prize of any person who presents a Prize winning Ticket in an Instant Lottery or presents or submits a Prize winning entry in a Promotional Instant Lottery.

- (b) Payment of a Prize to such a claimant in accordance with these Rules discharges the Licensee from any action, liability, claim or demand from any other person in relation to the entry.

RULE 11 ADDITIONAL CIRCUMSTANCES WHEN PRIZES ARE NOT PAYABLE

- (a) A Prize is not payable in an Instant Lottery or Promotional Instant Lottery:
- (i) if the Ticket in the Instant Lottery or an entry in the Promotional Instant Lottery presented by the claimant for the Prize is damaged, altered, reconstituted or counterfeit; or
 - (ii) if the Ticket in the Instant Lottery or entry in the Promotional Instant Lottery is stolen or is a Ticket or entry that has been printed but not issued by the Licensee; or
 - (iii) if the Licensee has reasonable cause to suspect fraud or attempted fraud (whether computer related or otherwise); or
 - (iv) if the Player has tendered insufficient Selling Fee for the Ticket or has presented a cheque that is subsequently dishonoured or if the form of payment tendered is not otherwise acceptable to the Licensee; or
 - (v) in such other circumstances as are specified on the Ticket or entry or as have been publicly advertised by the Licensee in relation to the Instant Lottery or Promotional Instant Lottery; or
 - (vi) in respect of a Ticket which fails any confidential security test of the Licensee; or
 - (vii) any other breach of these Rules which justifies disqualification.
- (b) A Prize in an Instant Lottery or Promotional Instant Lottery is not payable to a person apparently under the age of 18 years.
- (c) Where the Licensee receives a Prize claim form from a Player and a Prize is not payable under this clause on the Ticket or entry that relates to the Prize claim form, the Licensee must use its best endeavours to notify the person whose name and address is shown on the Prize claim form that a Prize is not payable under this clause and must provide reasons why the Prize is not payable.
- (d) Nothing in Rule 11(a) prevents a Prize from being paid in respect of a damaged Ticket or entry if the Licensee determines that the Ticket or entry is a valid Ticket or entry and that it has won a Prize.

RULE 12 LIMITATION OF LIABILITY

- (a) By entering an Instant Lottery or Promotional Instant Lottery a Player acknowledges that he or she has entered into an agreement with the Licensee, the Retailer and agrees to be bound by the provisions of these Rules which subsist for the benefit of the Licensee, Board of Directors, the Chief Executive Officer, the Retailer and all Employees thereof.

- (b) The Licensee, Directors, the Chief Executive Officer, the Retailer and all Employees thereof shall have no responsibility or liability to a Player or any other person by reason of the loss or destruction of a Ticket for any reason or from any cause (whether arising from, or contributed to by, negligence or otherwise) beyond the amount of the Selling Fee paid in respect of that Ticket.

- (c) The Licensee, Directors, and the Chief Executive Officer shall have no responsibility or liability to pay a Player who claims a Prize and is unable to submit a Ticket. The Licensee shall have discharged all liability in relation to payment of a Prize by making payment to a person in accordance with the Rules.

- (d) The Licensee, Directors, the Chief Executive Officer and each and every Employee or contractor of the Licensee shall have no liability or responsibility to a Player or any other person for or in respect of:
 - (i) any negligence, omission, delay or failure whatsoever on the part of any person in the carrying out or performance of any duty, function, obligation or discretion conferred or contemplated by the Rules or otherwise in or about the Conduct or promotion of any Instant Lottery or Promotional Instant Lottery; and

 - (ii) without prejudice to the generality of Rule 12(d)(i) hereof, any negligence, omission, delay or failure in relation to:
 - (1) the payment of Prizes;

 - (2) the processing and issue of a Ticket following acceptance of the Selling Fee in respect of an Instant Lottery or an entry in respect of a Promotional Instant Lottery;

 - (3) the processing of a Prize winning Ticket;

 - (4) the receipt and processing of a Prize claim form; and

 - (iii) without prejudice to the generality of Rule 12(d)(i) and Rule 12(d)(ii), any fraudulent or unlawful act or omission on the part of the Retailer or an employee, servant or contractor of the Retailer in respect of:
 - (1) the issue of a Ticket;

 - (2) the completion of a Prize claim form;

 - (3) the receipt of a Prize claim form;

- (4) the processing of a Prize claim;
 - (5) the payment of a Prize; and
- (iv) any statement made by a Retailer or an employee, servant or contractor of a Retailer or by the Licensee, or any Employee, servant or contractor of the Licensee to a Player.
- (e) Each and every Retailer and each and every Employee of a Retailer shall have no liability or responsibility to a Player or any other person for or in respect of:
 - (i) any negligence, omission, delay or failure whatsoever on the part of any person in the carrying out or performance of any duty, function, obligation or discretion conferred or contemplated by the Rules or otherwise in or about the Conduct of any Instant Lottery or Promotional Instant Lottery; and
 - (ii) without prejudice to the generality of Rule 12(e)(i) hereof, any negligence, omission delay or failure in relation to:
 - (1) the payment of Prizes;
 - (2) the processing and issue of a Ticket following acceptance of the Selling Fee in respect of an Instant Lottery or an entry in respect of a Promotional Instant Lottery; or
 - (3) the processing of a Prize winning Ticket.
- (f) The Licensee, the Chief Executive Officer, each and every Retailer and each and every Employee of the Licensee or a Retailer shall have no liability or responsibility to a Player or any person for or in respect of any failure, disruption or malfunction of Computer Linked Terminals, electrical power, telecommunications links or computers (whether arising from, or contributed to by, negligence or otherwise) resulting in loss or corruption of information retained on any Computer Records held by the Licensee.
- (g) The Licensee, Directors, the Chief Executive Officer, each and every Retailer and each and every Employee of the Licensee or a Retailer shall have no liability or responsibility for any consequence of interference with or interruption to any Instant Lottery or Promotional Instant Lottery due to fire, storm, flood, riot, civil commotion, strike, failure or disruption of electrical power supply or telecommunications or other cause not within the reasonable control of such person.
- (h) In the processing of any Ticket, Prize claim form or instructions received by a Retailer a Retailer shall for all purposes be the agent of a Player and not the agent of the Licensee or the Chief Executive Officer.
- (i) In the processing of a Prize claim form, the submission of a Prize claim form to the Licensee and the payment of a Prize, a Retailer shall at all times and for all purposes be the agent of a Player and not the agent of the Licensee or the Chief Executive Officer.
- (j) Notwithstanding the provisions of Rule 12(h), in the acceptance of Commission by a Retailer on behalf of the Licensee, the Retailer shall for this purpose be the agent of the Licensee and not the agent of the Player.

- (k) The State of New South Wales, the Crown in right of that State, the Government of that State, the Minister, their successors and the employees and agents of each and every one of them shall have as ample protection from liability in respect of their acts and omissions (whether arising from, or contributed to by, negligence or otherwise) and the acts, omissions and contingencies the subject of Rules 12(a) to 12(j) inclusive as those protected by said Rules.

RULE 13 EFFECTIVE DATE

- (a) The Instant Lottery Rules made pursuant to the Act and in force immediately prior to the date upon which these Rules take effect are rescinded.

- (b) Unless otherwise determined by the Chief Executive Officer any Ticket purchased in an Instant Lottery and Promotional Instant Lottery pursuant to Rules previously in force under any earlier Product Licence and which relate to an Instant Lottery to be Conducted on or after the date these Rules take effect shall be taken as being purchased or entered pursuant to these Rules.

RULE 14 AGREEMENTS RELATED TO PROMOTIONAL INSTANT LOTTERIES

The Licensee may enter into agreements or arrangements, subject to the provisions of the Act, with other persons or bodies for the purpose of promoting any Promotional Instant Lottery.

SCHEDULE 1

SUBSCRIPTIONS, COMMISSION AND SELLING FEE PAYABLE FOR INSTANT LOTTERIES

For Tickets printed prior to 21 May 2012:

Instant Lottery	Commission	Subscription	Selling Fee
\$1.10 Instant Lottery Ticket	\$0.10	\$1.00	\$1.10
\$2.00 Instant Lottery Ticket	\$0.15	\$1.85	\$2.00
\$2.50 Instant Lottery Ticket	\$0.18	\$2.32	\$2.50
\$3.00 Instant Lottery Ticket	\$0.20	\$2.80	\$3.00
\$4.00 Instant Lottery Ticket	\$0.25	\$3.75	\$4.00
\$5.00 Instant Lottery Ticket	\$0.30	\$4.70	\$5.00
\$10.00 Instant Lottery Ticket	\$0.60	\$9.40	\$10.00
\$15.00 Instant Lottery Ticket	\$0.90	\$14.10	\$15.00

For Tickets printed on or after 21 May 2012:

Instant Lottery	Commission	Subscription	Selling Fee
\$1.10 Instant Lottery Ticket	\$0.10	\$1.00	\$1.10
\$2.00 Instant Lottery Ticket	\$0.16	\$1.84	\$2.00
\$2.50 Instant Lottery Ticket	\$0.20	\$2.30	\$2.50
\$3.00 Instant Lottery Ticket	\$0.24	\$2.76	\$3.00
\$4.00 Instant Lottery Ticket	\$0.32	\$3.68	\$4.00
\$5.00 Instant Lottery Ticket	\$0.40	\$4.60	\$5.00
\$6.00 Instant Lottery Ticket	\$0.48	\$5.52	\$6.00
\$7.00 Instant Lottery Ticket	\$0.56	\$6.44	\$7.00
\$10.00 Instant Lottery Ticket	\$0.80	\$9.20	\$10.00
\$12.00 Instant Lottery Ticket	\$0.96	\$11.04	\$12.00
\$15.00 Instant Lottery Ticket	\$1.20	\$13.80	\$15.00
\$20.00 Instant Lottery Ticket	\$1.60	\$18.40	\$20.00

COUNCIL NOTICES

ALBURY CITY COUNCIL

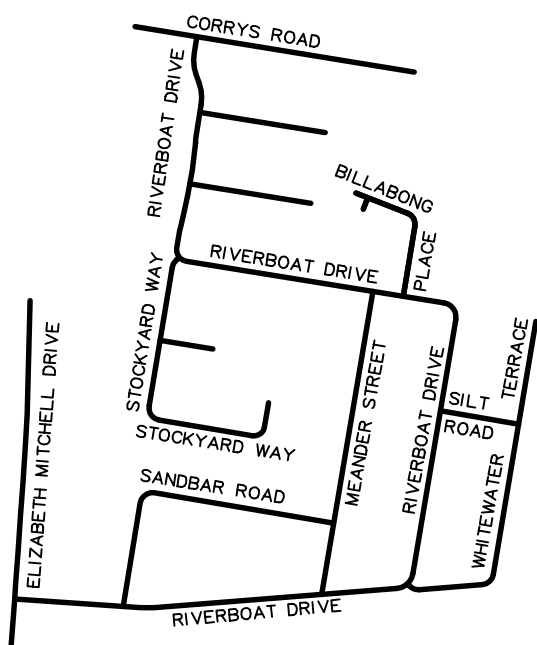
ROADS ACT 1993

Naming of Roads

Notice is hereby given that the Albury City Council, pursuant to section 162 of the *Roads Act 1993*, has officially named the roads to be created on a proposed subdivision of Lot 303 DP 1166158 off the east side of Elizabeth Mitchell Drive, Thurgoona. The adopted road names are:

- Billabong Place
- Meander Street
- Sandbar Road
- Silt Road
- Whitewater Terrace

The diagram hereunder shows the layout of these roads in relation to the surrounding road pattern.



FRANK ZAKNICH, General Manager, Albury City Council,
PO Box 323, Albury NSW 2640 [8498]

BEGA VALLEY SHIRE COUNCIL

ROADS ACT 1993

Naming of Roads

Notice is hereby given that Bega Valley Shire Council in conjunction with the National Parks and Wildlife Service of New South Wales and the Forest Corporation of New South Wales, pursuant to section 162 of the *Roads Act 1993*, has officially named the roads as shown hereunder:

Road Name	Locality
Alcocks Road	Tantawangalo
Alex Hut Trail	Nungatta
Andy Poole Drive	Tathra

Road Name	Locality
Anteater Road	Narrabarba
Apogee Road	Tantawangalo, Mount Darragh
Atkins Anderson Road	South Wolumla, Myrtle Mountain
Back Creek Link Firetrail	Nethercote
Backwater Trail	Coolagolite
Bandy Creek Firetrail	Brogo
Banksia Road	Narrabarba
Barrabooka North Road	Tanja, Wapengo
Barrabooka Road	Tanja
Barwon Road	Nullica
Bay Street	Tathra
Bay View Drive	Tathra
Beach Street	Pambula Beach
Beach Street	Tathra
Bega Street	Pambula
Bega Street	Quaama
Bega Street	Tathra
Ben Boyd Firetrail	Nullica, Boydtown
Ben Boyd Road	Nullica, Wyndham, Towamba
Benny Gowings Road	Murrah
Bermaguel Street	Quaama
Bermaguel Track	Bermagui
Big Jack Track	Cathcart
Bittangabee Road	Green Cape
Black Range Firetrail	Bournda
Boben Road	Mount Darragh, Wyndham
Bodalla Street	Quaama
Bold Granite Road	Coolangubra
Bollers Road	Tantawangalo
Booroo Street	Pambula Beach
Boulder Bay North Trail	Tathra
Boulder Bay South Track	Tathra
Bournda Lagoon Road	Bournda
Bournda Trig Firetrail	Bournda
Boyds Tower Road	Edrom
Boyds Tower Track	Edrom
Brittens Firetrail	Tantawangalo
Brittens Road	Tantawangalo
Brogo Firetrail	Brogo, Numbugga
Bruces Creek Road	Nadgee
Bruin Mountain Road	Coolangubra
Brunner Lane	Pambula

Road Name	Locality	Road Name	Locality
Brunker Street	Pambula	Devils Hole Road	Coolangubra, Cathcart
Buckland Road	Nadgee	Dignams Creek Road	Dignams Creek
Bullara Street	Pambula	Dilkera Road	Tathra
Burrawang Road	Kiah, Narrabarba	Dingo Street	Pambula
Cabarita Lane	Tarraganda	Dobbys Road	Lochiel, Nullica
Cadjangarry Trig Trail	Coolagolite	Donaldson Boundary Track	Murrah
Camos Trail	Nungatta	Doughy Road	Coolangubra
Candelo Creek Road	Mount Darragh	Dulin Road	Nullica, Towamba
Careys Firetrail	Mount Darragh, Candelo	Dummetts Road	Quaama
Careys Road	Mount Darragh	Eagle Road	Timbillica
Catematsu Trail	Nungatta, Yambulla	Earl Street	Quaama
Cathcart Trig Road	Cathcart	East Cochranes Road	South Wolumla
Cattlemans Track	Tantawangalo	East Lane	Tathra
Cemetery Road	Rocky Hall	Edna Drive	Tathra
Centre Ridge Road	Nadgee	Edrom Road	Edrom, Kiah, Wonboyn North
Chalkhills Road	South Wolumla, Lochiel	Emma Road	Reedy Swamp
Chalkhills West Firetrail	Myrtle Mountain, Mount Darragh	Entertainment Drive	Pambula Beach
Chefs Hat Road	Murrah	Esther Street	Tathra
Christophers Road	Quaama	Fairview Lane	Toothdale
City Rock Road	Green Cape	Family Way	Pambula Beach
Clarkes Road	Greendale, Mumbulla Mountain	Farrells Firetrail	Pericoe, Burragate
Cliff Place	Tathra	Fastigata Road	Steeple Flat, Bemboka
Club Avenue	Pambula Beach	Fauna Grove	Tathra
Cobargo Street	Quaama	Ferndale Lane	South Wolumla
Cochranes Road	South Wolumla	Field Buckets Extension Road	Quaama
Cockatoo Road	Nadgee	Field Buckets Road	Quaama, Murrah
Comans Lane	Tantawangalo	Fields Road	Tanja
Conga Road	Coolangubra	Fire Shed Trail	Tathra
Constitution Link Road	Mount Darragh	Flora Avenue	Pambula Beach
Constitution Trail	Mount Darragh	Flora Place	Tathra
Coolangubra Forest Way	Coolangubra, Cathcart	Foxy Trail	Nungatta
Copelands Knob Road	Nethercote, Nullica	Francis Hollis Drive	Tathra
Coraki Drive	Pambula Beach	Francis Road	Pambula
Corandirk Lane	Tarraganda	Fraxinoides Road	Steeple Flat
Corduroy Road	Timbillica	Friends Close	Pambula Beach
Corridgeree Lane	Tarraganda	Frogs Hollow Link	Bournda
Corridgeree Road	Tarraganda	Fun Drive	Pambula Beach
Cowdroy Lane	South Pambula	Furner Street	South Pambula
Cowdroys Road	Nelson	Gallery Road	Timbillica
Crawleys Creek Road	Lochiel	Games Bay Firetrail	Tathra, Wallagoot
Culgoa Crescent	Pambula Beach	Geall Road	Cuttagee
Curragudde Close	Pambula Beach	George Street	South Pambula
Cuttagee Creek Track	Coolagolite, Murrah	Georges Trail	South Wolumla
Davidson Street	Tathra	Gillards Road	Nelson
Daylight Ridge Firetrail	Nadgee	Gills Firetrail	South Wolumla

Road Name	Locality	Road Name	Locality
Glenall Lane	Toothdale	King Street	South Pambula
Gnupa Road	Lochiel, Wyndham	Kings Ridge Firetrail	Nelson
Goanna Road	Narrabarba, Kiah	Kingsley Road	Nungatta
Goodenia Rainforest Track	South Wolumla	Knights Creek Road	Murrah, Wapengo
Gordon Street	Quaama	Knox Link Track	Tantawangalo
Gordon Street	Tathra	Koorilla Street	Tathra
Gree Road	Nullica	Kydra Firetrail	Greenlands, Kybeyan
Green Cape Lighthouse Road	Green Cape, Wonboyn North	Lagoon Firetrail	Nelson
Green Fire Road	Coolagolite	Laings Road	Nungatta
Gwainurra Grove	Pambula Beach	Leos Creek Road	Nullica
Haighs Road	Tanja	Leumeah Street	Pambula Beach
Hallorans Trail	Pambula Beach, Pambula	Lillian Close	South Wolumla
Handfords Road	Nadgee, Timbillica	Little Gahan Street	Pambula
Haslingden Road	Stony Creek	Lloyd Street	South Pambula
Haven Lane	Toothdale	Lookout Firetrail	Nadgee, Wonboyn
Haven Place	Tathra	Loves Trail	Mount Darragh, Wyndham
Hayes Road	Nungatta	Maidens Road	Rocky Hall, Cathcart, Mount Darragh
Hayfield Road	Pericoe, Yambulla	Manam Road	Tarraganda
Head of Cuttagee Road	Cuttagee	Martin Street	Pambula
Hegartys Track	Green Cape	Mataganah Road	Coolangubra, Pericoe
Hergenahns Road	Murrah	Maxwells Road	Nadgee, Timbillica
Hetherington Way	Pambula Beach	McCarthys Firetrail	Tantawangalo
Hidden Valley Firetrail	Murrah	McGraths Road	Lochiel
Holiday Avenue	Pambula Beach	McPherson Circuit	Pambula
Hound Dog Trail	Nethercote	Memories Lane	Pambula Beach
Hub Boulevard	Pambula Beach	Merigan Street	Pambula
Idlewilde Crescent	Pambula	Merimbola Street	Pambula
Illoura Street	Tathra	Merrica River Firetrail	Nadgee
Ireland Timms Road	Nadgee, Timbillica	Merrica River Road	Nadgee
Ives Street	Pambula	Mervs Firetrail	Nungatta
Jellat Jellat Creek Firetrail	Bournda, Wallagoot	Middle Beach Road	Tanja
Jellat North Firetrail	Bournda, Black Range, Wallagoot	Middle Ridge Firetrail	Nelson
Jessops Creek Trail	Brogo	Mistake Firetrail	Bemboka, Brogo
Jinjera Parade	Pambula Beach	Mogareeka Village Firetrail	Mogareeka
John Taylor Crescent	Tathra	Mogila Track	Mogila, Tantawangalo
Jones Boundary Road	Cathcart	Monaro Street	Pambula
Kallata Lane	South Wolumla	Moore Wren Road	Tarraganda
Kanangra Street	Pambula Beach	Moruya Street	Quaama
Kangarutha Point Track	Tathra	Mount Darragh Firetrail	Mount Darragh
Kanoonah Road	Coolangubra	Mount Darragh Road	From South Pambula to Mount Darragh
Kessers Trail	Nungatta	Mount Harriet Road	Mount Darragh
Kestrel Road	Lochiel	Mount Peter Firetrail	Nelson
Kiah House Track	Edrom	Mountain Road	Nadgee
Kianinny Street	Tathra	Mowarry Point Trail	Edrom
Killarney Road	Tathra	Mowarry Trig Trail	Edrom

Road Name	Locality	Road Name	Locality
Mumbulla Creek Road	Tanja, Angledale, Greendale, Wapengo	Pimms Court	Tathra
Munje Street	Pambula	Pitt Street	South Pambula
Murrabrine Street	Quaama	Postmans Link Track	Tantawangalo
Murrah River Forest Road	Murrah, Cuttagee	Postmans Track	Tantawangalo
Murrah Street	Quaama	Pulpit Rock Road	Green Cape
Mustering Ground Road	Kiah	Quarry Firetrail	Bournda
Myanba Road	Coolangubra	Rainbow Street	Pambula
Myrrial River Road	Nullica	Rats Valley Road	South Wolumla
Myrtle Creek Trail	Coolagolite	Rayners Road	Cathcart
Myrtle Mountain Trail	Myrtle Mountain	Red Creek Road	Tinpot
Myrtle Road	Myrtle Mountain	Redfern Close	South Pambula
Naghi Road	Nadgee, Timbillica	Reedy Swamp Road	Tarraganda, Reedy Swamp, Chinnock
Narira Street	Quaama	Resort Parade	Pambula Beach
Narrabarba Trail	Timbillica	Rhyolite Trail	Nethercote
Narregol Street	Pambula	Riverview Crescent	Tathra
Nathan Street	South Pambula	Roberts Road	Tanja
New Line Road	Tantawangalo	Robinsons Track	Tantawangalo
New Trig Road	Coolangubra	Rocky Hall Firetrail	Rocky Hall, Cathcart
Newtons Road	Nadgee	Rodley Track	Nelson
Niagara Lane	Tantawangalo, Kameruka	Royds Creek Road	Nadgee
Noojee Street	Tathra	Sanctuary Close	Pambula Beach
North Tura Road	Bournda	Sanctuary Place	Tathra
Northview Drive	South Pambula	Sandy Creek Firetrail	Tanja
Nugget Trail	Greigs Flat	Sandy Walk	Pambula Beach
Nullica Road	Tarraganda	Sapphire Track	Pambula Beach, Pambula
Nullica Road	Nullica	Scotland Yard Road	Stony Creek
Numbat Trail	Nethercote, Nullica	Shelleys Road	Kiah, Wonboyn North
Numbugga Walls Firetrail	Morans Crossing, Bemboka, Numbugga	Short Street	South Pambula
Nunnock Camp Road	Tantawangalo	Sir William McKell Drive	Pambula
Ocean View Terrace	Tathra	Sirex Road	Cathcart
Old Bega Road	Steeple Flat, Bemboka	South Wolumla Trail	South Wolumla
Old Bridge Road	Nadgee	South Wolumla Firetrail	South Wolumla
Orchard Road	Rocky Hall	South Wolumla Road	South Wolumla, Toothdale
Oregon Street	Pambula	Springs Track	Green Cape
Orient Street	Quaama	Stafford Crescent	Tathra
Pacific Street	Tathra	Steeple Flat Road	Steeple Flat
Packers Swamp Road	Tantawangalo, Bemboka	Stephensons Lane	Quaama, Brogo
Paddymelon Road	Pericoe, Yambulla	Stockyard Creek Road	Coolangubra, Cathcart
Pambula Beach Road	Pambula, Pambula Beach	Stony Creek Link Trail	Timbillica
Pambula Lane	Pambula	Stony Creek Road	Timbillica
Panamuna Road	Tathra	Stoves Road	Cathcart, Rocky Hall, Mount Darragh
Panorama Drive	Tathra	Stringy Road	Nadgee
Penders Road	Tanja	Sugarloaf Firetrail	Nethercote, Nullica
Pheasants Peak Trail	Coolangubra	Summerells Firetrail	Tantawangalo, Mount Darragh
Picnic Point Road	Wonboyn, Wonboyn North		

Road Name	Locality
Summerhill Road	Greigs Flat
Sunnyside Road	Rocky Hall
Sunset Street	Pambula Beach
Surf Circuit	Pambula Beach
Swamp Road	Nadgee
Table Ridge Firetrail	Nadgee
Taleeban Street	Pambula Beach
Tantawangalo Lane	Tantawangalo
Tantawangalo Mountain Road	Tantawangalo, Candelo
Tarraganda Lane	Tarraganda, Bega
Tathra Road	Tathra, Kalaru, Jellat Jellat, Bega
Tathra Street	Tathra
Thompson Drive	Tathra
Ticehurst Close	Toothdale
Timbillica Road	Timbillica, Narrabarba
Tinpot Road	Tinpot, Wandella
Toallo Street	Pambula
Tomigee Street	Tathra
Tommys Bay Track	Nelson
Upper Cobargo Road	Stony Creek, Brogo
Waalimma Road	Nungatta
Walak Road	Nungatta
Walla Walla Road	Nungatta
Walla Walla Trail	Nungatta
Wallagoot Street	Tathra
Wangarabell Road	Nungatta
Warrigal Firetrail	Brogo
Watergums Road	Nadgee
Weemilah Drive	Pambula Beach
Weir Track	Tantawangalo
Wharf Road	Tathra
Wheeler Avenue	Tathra
Whitby Wilsons Road	Quaama
White Rock Road	Tathra
Widgeram Firetrail	Bournda
Wildlife Drive	Pambula Beach
Wildlife Drive	Tathra
Winnunga Street	Pambula Beach
Wog Quarry Road	Coolangubra
Wolumla Peak Road	South Wolumla, Lochiel
Wolumla Peak Trail	Myrtle Mountain, South Wolumla
Wombat Road	Narrabarba
Wonboyn Road	Narrabarba, Nadgee, Wonboyn

Road Name	Locality
Wrens Road	Murrah
Yakake Street	Tathra
Yellow Pinch Trail	South Wolumla, Yellow Pinch
Yenken Track	Mogareeka
Yourie Street	Quaama
Yowaka Road	Nethercote
Yowaka Street	Pambula
Yuppara Street	Tathra
Yuro Road	Nullica, Kiah

LEANNE BARNES, General Manager, Bega Valley Shire Council, PO Box 492 Bega NSW 2550. [8499]

DENILIQVIN COUNCIL

ROADS ACT 1993
Section 10

Dedication of Land as Public Road

Notice is hereby given that in accordance with section 10 of the *Roads Act 1993*, the Deniliquin Council dedicates the land described in the Schedule below as Public Road.

DES BILSKE, General Manager, Deniliquin Council, Civic Centre, Civic Place Deniliquin 2710.

Schedule

Lot 4101 Deposited Plan 1211736 [8500]

HAWKESBURY CITY COUNCIL

ROADS ACT 1993
Section 10

Dedication of Land as Public Road

Notice is hereby given by Hawkesbury City Council, pursuant to section 10 of the *Roads Act 1993*, that the land described in the Schedule below is hereby dedicated as public road.

Dated at Windsor 1st April 2016.

PETER JACKSON, General Manager, Hawkesbury City Council, 366 George Street, Windsor NSW 2756.

Schedule

Lot 1 in Deposited Plan 1212516 [8501]

ORANGE CITY COUNCIL

ROADS ACT 1993

Dedication of Land as Public Road

Notice is hereby given that in accordance with section 10 of the *Roads Act 1993*, the land described in the Schedule below is dedicated as a Public Road.

GARRY STYLES, General Manager, Orange City Council, PO Box 35, Orange NSW 2800

Schedule

Lot 24 DP 238935 being the land situated in Icely Road, Orange. [8502]

SHELLHARBOUR CITY COUNCIL

ROADS ACT 1993

Naming of Roads

Notice is hereby given that Shellharbour City Council, pursuant to section 162 of the *Roads Act 1993*, has officially named the road(s) as shown hereunder:

Name **Locality**
LUCERNE LANE North Macquarie

Description
Link between Borjeson Circuit and Scanlon Street

Name **Locality**
HONEYBEE CRESCENT North Macquarie

Description
Located off Escarpment Drive

Name **Locality**
CONNECTION ROAD North Macquarie

Description
Temporary link from Escarpment Drive to North Macquarie Road

Name **Locality**
CLOUDY LANE North Macquarie

Description
Located off Scanlon Street

Name **Locality**
BORJESON CIRCUIT North Macquarie

Description
Between Escarpment Drive and Ayrshire Lane

Name **Locality**
BARTLETT CRESCENT North Macquarie

Description
Located off Escarpment Drive

Name **Locality**
AYRSHIRE LANE North Macquarie

Description
Link between Borjeson Circuit and Scanlon Street

Name **Locality**
STOCKMAN ROAD North Macquarie

Description
Link between Borjeson Circuit and Connection Road

Name **Locality**
SCANLON STREET North Macquarie

Description
Link between North Macquarie Road and Stockman Road

Name **Locality**
MEANDER DRIVE North Macquarie

Description
Between Escarpment Drive and Violet Boulevard

Name **Locality**
MARKHAM DRIVE North Macquarie

Description
Located off Violet Boulevard

CAREY McINTYRE, General Manager, Shellharbour City Council, Locked Bag 155, Shellharbour City Centre 2529
GNB Ref: 0077 [8503]

TAMWORTH REGIONAL COUNCIL

ROADS ACT 1993

Section 162

ROADS REGULATION 2008
Part 2, Division 2

Naming of Public Roads

Notice is hereby given that Tamworth Regional Council, in pursuance of section 162 of the *Roads Act 1993*, has named the roads created by the subdivision of:

Lot 21 DP 838901 Daruka Road North Tamworth, 'Sealark Way', 'Scarborough Close' and 'Borrowdale Circuit',

Lot 1 DP 1211619 Calala 'Spinebill Terrace',

Lot 2 DP 773205 Goonoo Goonoo Road Hillvue 'Appaloosa Place' and 'Palomino Place' respectively and

Laneway off Irvine Street Kootingal 'Morrison Lane'

PAUL BENNETT, General Manager, Tamworth Regional Council, 437 Peel Street, Tamworth NSW 2340. [8504]

TENTERFIELD SHIRE COUNCIL

ROADS ACT 1993

Naming of Roads

Notice is hereby given that Tenterfield Shire Council, pursuant to section 162 of the *Roads Act 1993*, has officially named the road(s) as shown hereunder:

Name **Locality**
DALMOAK ROAD Maryland, Ruby Creek

Description
Council has renamed Maryland Road to Dalmoak Road from Amosfield Road, Ruby Creek to Summit Road, Maryland inclusive.

Name **Locality**
MOUNT LINDESAY ROAD Liston

Description
Existing Maryland Street, Liston from Rivertree Road to Herding Yard Creek Road, Liston

TONY HAYWARD, Acting General Manager, Tenterfield Shire Council, PO Box 214 Tenterfield NSW 2372
GNB Ref: 0075 [8505]

THE HILLS SHIRE COUNCIL

ROADS ACT 1993

Naming of Roads

Notice is hereby given that The Hills Shire Council, pursuant to section 162 of the *Roads Act 1993*, has officially named the road(s) as shown hereunder:

Name	Locality
GRACEMERE CRESCENT	Glenorie

Description

Extending in a north west direction from Halcrows Road ending at Lot 401 DP 752047.

DAVE WALKER, General Manager, The Hills Shire Council, 3 Columbia Court, Baulkham Hills 2153

GNB Ref: 0076 [8506]

THE HILLS SHIRE COUNCIL

ROADS ACT 1993

Section 10

Notice is hereby given that The Hills Shire Council dedicates the land described in the schedule below as public road under section 10 of the *Roads Act 1993*.

GENERAL MANAGER, The Hills Shire Council, 3 Columbia Court, Baulkham Hills NSW 2153

Schedule

All that piece or parcel of land known as Lot 2004 in DP 1201256 in The Hills Shire Council, Parish of Castle Hill, County of Cumberland, and as described in Folio Identifier 2004/1201256 [8507]

THE HILLS SHIRE COUNCIL

ROADS ACT 1993

Naming of Roads

Notice is hereby given that The Hills Shire Council, pursuant to section 162 of the *Roads Act 1993*, has officially named the road(s) as shown hereunder:

Name	Locality
WRIGLEY STREET	Kellyville

Description

Previously proposed and gazetted name not used in Nth Kellyville release area. Refer folio 4724 Gazetted 16/11/2012. Request to use in different location within same release area. Private road commencing at proposed road Neyland Street heading east into lots 1 & 2 DP 31754 where it ends.

DAVE WALKER, General Manager, The Hills Shire Council, 3 Columbia Court, Baulkham Hills 2153

GNB Ref: 0078 [8508]

WAGGA WAGGA CITY COUNCIL

ROADS ACT 1993

Division 1 of Part 3

Notice of Redefinition of the Boundaries of a Public Road
Wagga Wagga City Council hereby declares that the lands described in the Schedule below excluding any mines or deposits of minerals in the lands, are acquired in accordance with the provisions of Division 1 of Part 3 of the *Roads Act 1993* for public road.

Dated at Wagga Wagga this 4th day of April 2016.

ALAN LEE ELDRIDGE, General Manager, Wagga Wagga City Council

Schedule

Lot 1 in DP 1209399
Lot 2 in DP 1209399
Lot 3 in DP 1209399
Lot 4 in DP 1209399 [8509]

By Authority

Government Printer