SCHEDULE 1

Peak Demand Reduction Scheme Rule of 2022

The Hon Matt Kean, MP
Treasurer, and Minister for Energy

Simplified outline

The following is a simplified outline of this Rule:

- clauses 1-3 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 4 sets out the definition of Capacity Holder
- clause 5 sets out the definition of a Recognised Peak Activity
- clause 6 sets out the conditions for the creation of Peak Reduction Certificates
- clause 7 sets out the calculation method for determining Peak Demand Reduction Capacity under the Peak Demand Savings Method
- clause 8 sets out the calculation method for determining Peak Demand Reduction Capacity under the Peak Demand Shifting Method
- clause 9 sets out the calculation method for determining Peak Demand Reduction Capacity under the Peak Demand Response Method
- clause 10 sets out the definitions
- Schedule A sets out Factors
- Schedule B sets out the Activity Definitions for Reducing Demand Using Efficiency

1 Name and commencement

This Rule is the *Peak Demand Reduction Scheme Rule of 2022* and commences on 15 August 2022.

2 Objects of the Rule

The object of this Rule is to specify provisions for the calculation and creation of Peak Reduction Certificates in respect of any activity, or class of activities, prescribed by the Rule.

3 Status and Operation of the Rule

3.1 This Rule is a Peak Demand Reduction Scheme Rule made under Part 2 of Schedule 4A of the Act.

3.2 The terms used in this Rule have the meaning set out in clause 10, otherwise terms have the same meanings as in Part 2 of Schedule 4A of the Act.

4 Capacity Holder

4.1 The Capacity Holder of Peak Demand Reduction Capacity resulting from a Recognised Peak Activity is:

(a) the person that meets the definition of Capacity Holder in the relevant Calculation Method at the relevant Implementation Date, provided that, that person has not nominated another person to be the Capacity Holder in accordance with clause 4.1 (b), or

(b) the person that has been nominated as the Capacity Holder by the person in clause 4.1 (a), provided that:

(i) the nominee consented to the nomination on or before the Implementation Date and did not withdraw consent before the Implementation Date; and

(ii) the nomination and consent are in a form and manner approved by the Scheme Administrator.

4.2 A person is deemed to be the only Capacity Holder of Peak Demand Reduction Capacity resulting from an Implementation of a Recognised Peak Activity where:

(a) the same activity which constituted the Implementation of the Recognised Peak Activity also constituted an Implementation under the Energy Savings Scheme;

(b) the Implementation Date of the Implementation under the Energy Savings Scheme is:

(i) on or after 1 April 2022; and

(ii) on or before the first anniversary of the commencement of this Rule;

(c) the person was the Energy Saver, as that term is defined under the scheme rules for the Energy Savings Scheme, as at the Implementation Date under the Energy Savings Scheme; and

(d) the person is accredited in respect of the Recognised Peak Activity on or before the first anniversary of the commencement of this Rule.

5 Recognised Peak Activity

5.1 A Recognised Peak Activity is any activity that:

(a) provides capacity to reduce peak demand during the Peak Demand Reduction Period;

(b) occurs in a Site or Sites connected to the electricity network within New South Wales;

(c) it is not unlawful in New South Wales on the Implementation Date; and

(d) has an Implementation Date on or after 1 April 2022.

5.2 A Recognised Peak Activity may:

(a) involve multiple Activity Definitions or items of End-User Equipment;

(b) occur at a single Site or across multiple Sites where each Implementation has its own Implementation Date; and

(c) be delivered by Implementations with the same or different Implementation Dates.

5.3 The replacement or removal of End-User Equipment only constitutes a Recognised Peak Demand Reduction Activity if the End-User Equipment:

(a) is not refurbished, re-used or resold; and

(b) is disposed of in accordance with legal requirements imposed through a statutory or regulatory instrument of the Commonwealth or a State or Territory of the Commonwealth, including by obtaining evidence for any refrigerants being disposed of or recycled.

5.4 An activity is not a Recognised Peak Activity:

(a) if it results in the creation of Peak Demand Reduction Capacity by reducing safety levels or permanently reducing production or service levels;

(b) if it leads to a net increase in greenhouse gas emissions;

(c) if it is undertaken to comply with any mandatory legal requirement imposed through a statutory or regulatory instrument of the Commonwealth or a State or Territory of the Commonwealth, including but not limited to National Construction Code and BASIX affected development requirements, except for alterations, enlargements or extensions of a BASIX affected development as defined in clause 3(1)(c) of the *Environmental Planning and Assessment Regulation 2000*;

(d) if it is a Standard Control Service or Prescribed Transmission Service undertaken by a Network Service Provider in accordance with the National Electricity Rules under the *National Electricity (NSW) Law*, except if the activity is a Non-Network Option; or

(e) if it is eligible to create tradeable certificates under the *Renewable Energy (Electricity) Act 2000 (Cth)*, except if the activity includes the installation of a replacement heat pump water heater.

6 Creation of Peak Reduction Certificates

6.1 An Accredited Certificate Provider may only create Peak Reduction Certificates for a Recognised Peak Activity if:

(a) the Accredited Certificate Provider:

(i) is accredited in respect of the activity on or before the Implementation Date for the activity; or

(ii) was accredited under the Energy Savings Scheme on or before the Implementation Date for the activity, in respect of a Recognised Energy Savings Activity, an implementation of which:

(A) was constituted by the same activity which constitutes the Implementation of the Recognised Peak Activity; and

(B) had an Implementation Date under the Energy Savings Scheme on or after 1 April 2022 and on or before the first anniversary of the commencement of this Rule;

(b) the Accredited Certificate Provider is the Capacity Holder;

(c) Peak Reduction Certificates have not already been created for that Peak Demand Reduction Capacity for the relevant Compliance Period;

(d) for the purpose of applying to register the creation of Peak Reduction Certificates for the Implementation, the Accredited Certificate Provider has provided the Scheme Administrator with the following required data and evidence:

(i) the Accredited Certificate Provider identifier;

(ii) the Recognised Peak Activity identifier;

(iii) the Address of the Site or Sites where the Implementation(s) took place;

(iv) any other identifiers required to identify the Site or Sites where the Implementation(s) took place;

(v) the Implementation Date of the Implementation(s);

(vi) the Network Factor applied for each Implementation;

(vii) the Australian Business Number (if any) of the entity utilising the End-Use Service;

(viii) the cost to the person who pays for the goods or services that comprise the Implementation, excluding GST;

(ix) the type of the End-Use Service for which Peak Demand Reduction Capacity was created in accordance with Table A1 of Schedule A;

(x) the Business Classification of the entity utilising the End-Use Service in accordance with Table A2 of Schedule A;

(xi) the Method or sub-method and Activity Definition, where relevant, used to calculate the Peak Demand Reduction Capacity;

(xii) the Peak Demand Reduction Capacity calculated under each Activity Definition that is used for the Implementation; and

(xiii) any other data providing evidence of Peak Demand Reduction Capacity from the Implementation as Published, from time to time, by the Scheme Administrator.

(e) for the purpose of section 106(7) of Schedule 4A of the Act, the Number of Certificates arising from a Recognised Peak Activity is determined in accordance with Equation 1.

6.2 Peak Reduction Certificates are calculated in Equation 1 using inputs generated from clauses 7, 8, 9 and Schedule A.

Equation 1

Number of Certificates = Peak Demand Reduction Capacity × *Network Loss Factor* × 10

Where:

- *Number of Certificates* is based on 1 Certificate = 0.1 kW of Peak Demand Reduction Capacity averaged over 1 hour and is apportioned across the Lifetime of an Implementation to reflect the Peak Demand Reduction Capacity available in each Compliance Period
- *Peak Demand Reduction Capacity*, in kW, is calculated using Equation 2a
- *Network Loss Factor* is the value from Table A3 in Schedule A corresponding to the distribution network
- *10* is to convert from kW to 0.1 kW

6.3 Peak Demand Reduction Capacity may be totalled over more than one Implementation of the same Method or sub-method and Activity Definition to create Peak Reduction Certificates. The Number of Certificates is rounded down for each batch with the remaining fraction of Certificates apportioned at the discretion of the Scheme Administrator.

7 Peak Demand Savings Capacity

7.1 Equipment Requirements and Classifications Requirements for acceptable End-User Equipment

7.1.1 Under the Reducing Demand Using Efficiency method, Equipment Requirements apply to End-User Equipment. The Equipment Requirements are specified in clause 7.2 and the Scheme Administrator may Publish from time to time additional Equipment Requirements that apply to a specified calculation method of this Rule.

7.1.2 The Scheme Administrator may, on its own motion or on an application made under clause 7.1.3, accept Products as meeting the Equipment Requirements referred to in clause 7 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, and/or

(d) Publishing a reference to a product register, as in force from time to time, published by a specified body, along with any restrictions on that product register - so long as the Scheme Administrator is satisfied that the requirements for listing a product on the product register are substantially the same as the relevant Equipment Requirements set out in clause 8 other than any additional Equipment Requirements published by the Scheme Administrator in accordance with clause 7.1.1.

Note: For example, the Scheme Administrator publishes a reference to the energy upgrades register of products published by the Victorian Essential Services Commission along with the restriction that only those products on the register that are heat pump water heaters are accepted as meeting the Equipment Requirements for the purposes of cl 7.1.2.

7.1.3 Subject to clause 7.1.4, any Accredited Certificate Provider (or other persons as may be specified in a notice Published by the Scheme Administrator), may apply to the Scheme Administrator to have a Product accepted as meeting the Equipment Requirements, if 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 7.1.3;

(ii) the exercise of the Scheme Administrator's powers under clauses 7.1.2 and 7.1.5; and

(iii) the payment and collection of fees under this clause 7.1.3(b);

(c) identify the Product; and

(d) provide evidence that the Product meets all the Equipment Requirements.

7.1.4 The Scheme Administrator may limit the number of applications that may be made during a period under clause 7.1.3, either in aggregate or by particular persons or classes of persons, by Publishing a notice that sets out that period and limit.

7.1.5 The Scheme Administrator may, at any time, cease to accept a Product as meeting the Equipment Requirements, if it:

(a) notifies all Accredited Certificate Providers accredited for the relevant Recognised Peak 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.

7.1.6 The Scheme Administrator may accept or reject an application made under clause 7.1.3.

7.1.7 Without limiting clause 7.1.6, the Scheme Administrator may reject an application made under clause 7.1.3 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.

7.2 Reducing Demand Using Efficiency Activity Requirements

Equation 2a

Peak Demand Reduction Capacity = Peak Demand Savings Capacity × Summer Peak Demand Reduction Duration × Lifetime

Where:

- *Peak Demand Savings Capacity*, in kW, is calculated using the relevant equations in Schedule B
- *Summer Peak Demand Reduction Duration* is 6 hours based on the Peak Demand Reduction Period of 2.30pm to 8.30pm AEST
- *Lifetime*, in years, is the default lifetime of the End-User Equipment as defined for the relevant Activity Definition in Schedule B

7.2.1 For Activity Definition HVAC1, SYS2:

7.2.2 The Peak Demand Reduction Capacity for an Implementation is to be calculated using Equation 2a provided that:

(a) the Site is a Residential Building or a Small Business Site, as evidenced to the satisfaction of the Scheme Administrator;

(b) the Eligibility Requirements for the relevant Activity Definition are met immediately prior to the Implementation Date;

(c) the completed Implementation satisfies all of the relevant Implementation Requirements;

(d) each item of installed End-User Equipment meets all of the Equipment Requirements in the relevant Activity Definition of Schedule B; and

(e) each item of End-User Equipment is installed at an Address that is connected to the Electricity Network in New South Wales.

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

7.2.4 For the purposes of clause 106(6)(b) of Schedule 4A of the Act, Peak Demand Reduction Capacity is taken to be created at the start of the compliance period for the lifetime of the activity.

7.2.5 The Capacity Holder is the Purchaser.

7.2.6 For Activity Definition RF1:

7.2.6.1 The Peak Demand Reduction Capacity for an Implementation is to be calculated using Equation 2a, provided that:

(a) the Site is a Residential Building or Small Business Site;

(b) each item of End-User Equipment meets the Equipment Requirements;

(c) each item of End-User Equipment is removed from the Site and disposed of; and

(d) each item of End-User Equipment is removed from an Address that is connected to the Electricity Network in New South Wales.

7.2.6.2 The Capacity Holder is the person who is contracted to remove the End-User Equipment.

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

7.2.6.4 For the purposes of clause 106(6)(b) of Schedule 4A of the Act, Peak Demand Reduction Capacity is taken to be created at the start of the compliance period for the lifetime of the activity.

7.2.7 For Activity Definitions HVAC2, WH1, RF2, SYS1:

7.2.7.1 The Peak Demand Reduction Capacity for an Implementation is to be calculated using Equation 2a, provided that:

(a) each item of End-User Equipment meets the Equipment Requirements in an Activity Definition listed in Schedule B;

(b) each item of End-User Equipment meets the Implementation Requirements as specified in the relevant Activity Definition; and

(c) each item of End-User Equipment is installed at an Address that is connected to the Electricity Network in New South Wales.

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

7.2.7.3 For the purposes of clause 106(6)(b) of Schedule 4A of the Act, Peak Demand Reduction Capacity is taken to be created at the start of the compliance period for the lifetime of the activity.

7.2.7.4 The Capacity Holder is the Purchaser.

7.3 Measured Peak Demand Savings

(blank)

8 Peak Demand Shifting Capacity

(blank)

9 Peak Demand Response Capacity

(blank)

10 Definitions and Interpretation

10.1 In this Rule:

"Accredited Certificate Provider" has the same meaning it has in the Act.

"Act" means the *Electricity Supply Act 1995*.

"Activity Definition" means an activity as specified in a Schedule to this Rule.

"Address" means a street address within New South Wales, in a format approved by the Scheme Administrator.

"AS" means an Australian Standard as published by SAI Global.

"**AS/NZS"** means an Australian/New Zealand Standard as published by SAI Global.

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

"Capacity Holder" means the person as defined in clause 4.1 of this Rule.

"Electricity Network" means all electricity Transmission Systems and Distribution Systems.

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

"End-Use Service" means the primary service provided by End-User Equipment, such services being as detailed in Table A1 of Schedule A.

"End-User Equipment" means electricity consuming equipment, processes, or systems, including the equipment directly consuming electricity, and other equipment that causes, controls or influences the consumption of electricity

"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 or as Published from time to time by the Scheme Administrator in accordance with clause 7.1.1.

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

"GST" means the tax imposed by the *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and the related impositions by Acts of the Commonwealth.

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

"hW" means a hectowatt of electrical power.

"Implementation" means the delivery of a Recognised Peak Activity at a Site.

"Implementation Date" is defined for each Recognised Peak Activity in clause 7 of this Rule.

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

"kW" means a kilowatt of electrical power.

"kWh" means a kilowatt-hour of energy.

"Large Customer" has the same meaning as it has in the *National Energy Retail Law (NSW)*.

"Licensed" means a person that holds a current licence that covers activities in New South Wales for the duration of the Implementation.

"Lifetime" means the time period over which Peak Demand Reduction Capacity will be delivered.

"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).

"Non-Habitable Building" means a building built as a BCA Class 10a or Class 10b building.

"Non-Network Option" has the same meaning as it has in the National Electricity Rules under the *National Electricity (NSW) Law*.

"Number of Certificates" means the number of Peak Reduction Certificates permitted to be created by an Accredited Certificate Provider for Peak Demand Reduction Capacity calculated in accordance with the clauses and methods in this Rule.

"Peak Demand Reduction Capacity" means how much a Recognised Peak Activity can reduce electricity demand during the peak demand reduction period, measured in average hectowatts per hour, calculated using the relevant equations in this Rule.

"Prescribed Transmission Services" has the same meaning as it has in the National Electricity Rules under the *National Electricity (NSW) Law*.

"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.

"Publish" means make a written notice publicly available, on the relevant IPART or NSW Government website.

"Purchaser" means the person who purchases or leases the goods or services that enable the relevant Peak Demand Reduction Capacity 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.

"Recognised Peak Activity" is an activity that meets all of the requirements of clause 6 of this Rule.

"Regulations" means regulations made for the purposes of Part 2 of Schedule 4A of the Act.

"Residential Building" means a building or part of a building classified as a BCA Class 1, 2 or 4 building, and may include any Non-Habitable Building on the same site.

"Scheme Administrator" has the same meaning as in the Act.

"Site" means the location of the End-User Equipment included in a Recognised Peak Activity, as defined by:

(a) an Address; or

(b) a unique identifier, as specified for the relevant Implementation that identifies the affected End-User Equipment.

"Small Business Site" means a Site:

(a) that is entirely occupied by one business, with ABN recorded to meet the requirements of clause 6.1(d)(vii); and

(b) where the business, as a consumer of electricity at the Site:

(i) is a Small Customer (and, for the avoidance of doubt, has not aggregated its load at the Site with consumption at other Sites for the purposes of being treated as a Large Customer under its electricity purchase arrangements); or

(ii) is a customer of an Exempt Seller, and has an annual electricity consumption below the Upper Consumption Threshold for electricity, specified in the *National Energy Retail Law (NSW).*

"**Small Customer**" has the same meaning as it has in the *National Energy Retail Law (NSW)*.

"**Standard Control Service**" has the same meaning as it has in the National Electricity Rules under the *National Electricity (NSW) Law*.

Schedule A Classifications and calculation factors

Table A1: 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
Materials handling, conveying
Other machines
Electricity supply
Unknown
Other End-Use Services as Published by the Scheme Administrator

Table A2: Business Classifications

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

Business Classification
R Arts and Recreation Services
S Other Services
Residential
Unknown

Table A3: Network Loss Factors

Distribution Network Area	Network Loss Factor
Ausgrid	1.04
Endeavour	1.05
Essential	1.05

Table A4: Baseline Peak Adjustment and Peak Adjustment Factors for Demand Savings activities

Activity Definition	Peak Adjustment Factor	Baseline Peak Adjustment Factor
WH1	0.77	1
RF1	1.25	1.25
RF2	1	1
SYS1 (Refrigeration applications)	0.56	0.56
SYS2	0.28	0.28

Table A5: Temperature Factor based on BCA Climate Zone

BCA Climate Zone	Temperature Factor
2 (Coffs Harbour)	0.48
4 (Narrabri)	1.03
5 (Randwick)	0.55
6 (Richmond)	1.04
7 (Bathurst)	0.92
8 (Armidale)	0.55

Table A6: Firmness Factor

Activity	Firmness Factor
HVAC1	1
HVAC2	1
WH1	1
RF1	1
RF2	1
SYS1	1
SYS2	1

Schedule B Calculation Methods for Reducing Demand Using Efficiency

Activity Definition HVAC1

Name of Activity

INSTALL A NEW HIGH EFFICIENCY AIR CONDITIONER OR REPLACE AN EXISTING AIR CONDITIONER WITH A HIGH EFFICIENCY AIR CONDITIONER

Eligibility Requirements

1. This activity must be an installation of a new high efficiency air conditioner or a replacement of an existing air conditioner (whether operational or not) with a high efficiency air conditioner.

Equipment Requirements

1. The New End-User Equipment or replacement End-User Equipment must be a registered product in the GEMS Registry as complying with the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019.
2. If the New End-User Equipment or replacement End-User Equipment has a Cooling Capacity recorded in the GEMS Registry:
    a. It must have a Residential TCSPF_mixed value, as recorded in the GEMS Registry, equal to or greater than the Minimum Residential TCSPF_mixed value for the corresponding Product Type and Cooling Capacity in Table HVAC1.3; or
    b. If the New End-User Equipment or replacement End-User Equipment does not have a Residential TCSPF_mixed value recorded in the GEMS Registry, then it must have an EER in the GEMS Registry equal to or greater than the Minimum EER for the Product Type and Cooling Capacity in Table HVAC1.4.
3. The new or replacement End User Equipment must have demand response capability in accordance with AS4755.3.1.

Implementation Requirements

1. Any existing End-User Equipment must be removed.
2. The New End-User Equipment or replacement End-User Equipment must be installed.
3. The activity, including the removal of any existing End-User Equipment, must be performed or supervised by a suitably Licensed person in compliance with the relevant standards and legislation.

Activity Peak Demand Reduction Capacity

Peak Demand Savings Capacity = ((Baseline Input Power × Baseline Peak Adjustment Factor) – (Input Power × Peak Adjustment Factor)) × Firmness Factor

Where:

- *Baseline Input Power, in kW,* is calculated using Equation HVAC1.1
- *Baseline Peak Adjustment Factor* is calculated using Equation HVAC1.2
- *Input Power, in kW,* is the rated input power at 35°C as recorded in the GEMS Registry
- *Peak Adjustment Factor* is equal to the Baseline Peak Adjustment Factor
- *Firmness Factor,* as a fraction, is the likelihood that the capacity holder will reduce demand from the End-User Equipment during a system peak event as defined in Table A6.

Equation HVAC1.1

Baseline Input Power = Rated Capacity / Baseline EER

Where:

- *Rated Capacity* is the rated cooling capacity at 35°C as recorded in the GEM registry
- *Baseline EER is* specified in Table HVAC1.1 (for new) and Table HVAC1.2 (for replacement), according to the Product Type and Cooling Capacity.

Equation HVAC1.2

Baseline Peak Adjustment Factor = Temperature Factor × Usage Factor

Where:

- *Temperature Factor* is defined in Table A5 based on the BCA Climate Zone of the Implementation
- *Usage Factor* is 0.72

Table HVAC1.1 – Baseline EER for a new air conditioner

Product Type	Cooling Capacity, R (kW)	Baseline Cooling EER
Air-air, Non-Ducted	R < 4	3.73
Air-air, Non-Ducted	4 ≤ R < 10	3.28
Air-air, Ducted	R < 10	3.15
Air-air, Ducted or Non-Ducted	10 ≤ R < 39	3.15
Air-air, Ducted or Non-Ducted	39 ≤ R ≤ 65	2.95

Table HVAC1.2 – Baseline EER for a replacement air conditioner

Product Type	Cooling Capacity, R (kW)	Baseline Cooling EER
Air-air, Non-Ducted	R < 4	3.39
Air-air, Non-Ducted	4 ≤ R < 10	2.98
Air-air, Ducted	R < 10	2.84
Air-air, Ducted or Non-Ducted	10 ≤ R < 39	2.84
Air-air, Ducted or Non-Ducted	39 ≤ R ≤ 65	2.79

Table HVAC1.3 – Residential Minimum TCSPF Requirement

Product Type		Cooling Capacity, R (kW)	Minimum Residential TCSPF_mixed
Air-air, Split Systems	Non-Ducted	R < 4	5.5
	Non-Ducted	4 ≤ R < 6	5.0
	Non-Ducted	6 ≤ R < 10	4.5
	Ducted	R < 10	4.0
	Ducted or Non-Ducted	10 ≤ R < 13	4.0
	Ducted or Non-Ducted	13 ≤ R < 25	4.0
	Ducted or Non-Ducted	25 ≤ R ≤ 65	4.0
Air-air, Unitary	Ducted or Non-Ducted	R ≤ 65	3.0

Table HVAC1.4 – Minimum EER Requirement*

Product Type		Cooling Capacity, R (kW)	Minimum EER
Air-air, Split Systems	Non-Ducted	R < 4	4.4
	Non-Ducted	4 ≤ R < 6	3.7
	Non-Ducted	6 ≤ R < 10	3.6
	Ducted	R < 10	3.6
	Ducted or Non-Ducted	10 ≤ R < 13	3.6
	Ducted or Non-Ducted	13 ≤ R < 25	3.4
	Ducted or Non-Ducted	25 ≤ R ≤ 65	3.3
Air-air, Unitary	Ducted or Non-Ducted	R ≤ 65	3.4

*Only to be used if there is no TCSPF data recorded in the GEMS registry.

Lifetime

Lifetime = 10 years

Activity Definition HVAC2

Name of Activity

INSTALL A NEW HIGH EFFICIENCY AIR CONDITIONER OR REPLACE AN EXISTING AIR CONDITIONER WITH A HIGH EFFICIENCY AIR CONDITIONER

Eligibility Requirements

1. This activity must be an installation of a new high efficiency air conditioner or a replacement of an existing air conditioner (whether operational or not) with a high efficiency air conditioner.

Equipment Requirements

1. The New or replacement End-User Equipment must be a registered product in the GEMS Registry as complying with the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019.
2. If the New End-User Equipment or replacement End-User Equipment has a Cooling Capacity recorded in the GEMS Registry:
    a. The New End-User Equipment or replacement End-User Equipment must have a Commercial TCSPF_mixed value, as recorded in the GEMS Registry, greater than or equal to the Minimum Commercial TCSPF_mixed value for the corresponding Product Type and Cooling Capacity in Table HVAC2.3; or
    b. If the New End-User Equipment or replacement End-User Equipment does not have a Commercial TCSPF_mixed value recorded in the GEMS Registry, then the EER in the of the New End-User Equipment or replacement End-User Equipment must be equal to or greater than the Minimum EER for the Product Type and Cooling Capacity in Table HVAC2.4.
3. The new or replacement End User Equipment must have demand response capability in accordance with AS4755.3.1 or IEEE 2030.5.

Implementation Requirements

1. Any existing End-User Equipment must be removed.
2. The New End-User Equipment or replacement End-User Equipment must be installed.
3. The activity, including the removal of any existing End-User Equipment, must be performed or supervised by a suitably Licensed person in compliance with the relevant standards and legislation.
4. The New or replacement End-User Equipment must not be installed in a Residential Building unless the activity is the replacement of an existing air conditioner in a centralised system or in the common areas of a Class 2 building.

Activity Peak Demand Reduction Capacity

Peak Demand Savings Capacity = ((Baseline Input Power × Baseline Peak Adjustment Factor) – (Input Power × Peak Adjustment Factor)) × Firmness Factor

Where:

- *Baseline Input Power*, in kW, is calculated using Equation HVAC2.1
- *Baseline Peak Adjustment Factor* is calculated using Equation HVAC2.2
- *Input Power*, in kW, is the rated input power at 35°C as recorded in the GEMS registry
- *Peak Adjustment Factor* is found in Table A4
- *Firmness Factor*, as a fraction, is the likelihood that capacity will be available during a system peak event as defined in Table A6.

Equation HVAC2.1
Baseline Input Power = Rated Capacity / Baseline EER

Where:

- *Rated Capacity* is the rated cooling capacity at 35°C as recorded in the GEM registry
- *Baseline EER is* specified in Table HVAC2.1 (for new) and Table HVAC2.2 (for replacement), according to the Product Type and Cooling Capacity.

Equation HVAC2.2
Baseline Peak Adjustment Factor = Temperature Factor × Usage Factor

Where:

- *Temperature Factor* is defined in Table A5 based on the BCA Climate Zone of the Implementation
- *Usage Factor* is 0.6

Table HVAC2.1 – Baseline EER for a new air conditioner

Product Type	Cooling Capacity, R (kW)	Baseline Cooling EER
Air-air, Non-Ducted	R < 4	3.73
Air-air, Non-Ducted	4 ≤ R < 10	3.28
Air-air, Ducted	R < 10	3.15
Air-air, Ducted or Non-Ducted	10 ≤ R < 39	3.15
Air-air, Ducted or Non-Ducted	39 ≤ R ≤ 65	2.95

Table HVAC2.2 – Baseline EER for a replacement air conditioner

Product Type	Cooling Capacity, R (kW)	Baseline Cooling EER
Air-air, Non-Ducted	R < 4	3.39
Air-air, Non-Ducted	4 ≤ R < 10	2.98
Air-air, Ducted	R < 10	2.84
Air-air, Ducted or Non-Ducted	10 ≤ R < 39	2.84
Air-air, Ducted or Non-Ducted	39 ≤ R ≤ 65	2.79

Table HVAC2.3 – Minimum TCSPF Requirement

Product Type		Cooling Capacity, R (kW)	Minimum Commercial TCSPF_mixed
Air-air, Split Systems	Non-Ducted	R < 4	7.0
	Non-Ducted	4 ≤ R < 6	6.0
	Non-Ducted	6 ≤ R < 10	6.0
	Ducted	R < 10	5.0
	Ducted or Non-Ducted	10 ≤ R < 13	5.0
	Ducted or Non-Ducted	13 ≤ R < 25	5.0
	Ducted or Non-Ducted	25 ≤ R ≤ 65	5.0
Air-air, Unitary	Ducted or Non-Ducted	R ≤ 65	3.5

Table HVAC2.4 – Minimum EER Requirement*

Product Type		Cooling Capacity, R (kW)	Minimum EER
Air-air, Split Systems	Non-Ducted	R < 4	4.4
	Non-Ducted	4 ≤ R < 6	3.7
	Non-Ducted	6 ≤ R < 10	3.6
	Ducted	R < 10	3.6
	Ducted or Non-Ducted	10 ≤ R < 13	3.6
	Ducted or Non-Ducted	13 ≤ R < 25	3.4
	Ducted or Non-Ducted	25 ≤ R ≤ 65	3.3
Air-air, Unitary	Ducted or Non-Ducted	R ≤ 65	3.4

*Only to be used if there is no TCSPF data recorded in the GEMS registry.

Lifetime

Lifetime = 10 years

Activity Definition WH1

Name of Activity

REPLACE ONE OR MORE EXISTING HOT WATER BOILERS OR WATER HEATERS WITH ONE OR MORE AIR SOURCE HEAT PUMP WATER HEATER SYSTEMS

Eligibility Requirements

1. The existing End-User Equipment must be gas or electric resistance hot water boiler(s) or water heater(s).
2. The existing gas or electric resistance hot water boiler(s) or water heater(s) do(es) not have to be in working order at the time of replacement.

Equipment Requirements

1. The installed End-User Equipment must be an air source heat pump water heater as defined by AS/NZS 4234.
2. The installed End-User Equipment must achieve minimum annual energy savings, when determined in accordance with the modelling procedure published by the Scheme Administrator, of:
    - 60% when modelled in climate zone HP3-AU if the Site is in BCA Climate Zone 2, 3, 4, 5 or 6;
    - 60% when modelled in climate zone HP5-AU if the Site is in BCA Climate Zone 7 or 8;
3. The installed End-User Equipment must be certified to comply with AS/NZS 2712 if it has a storage volume less than or equal to 700L.
4. The installed End-User Equipment must be accepted in a manner determined by the Scheme Administrator.

Implementation Requirements

1. The existing End-User Equipment must be removed.
2. The replacement End-User Equipment must be installed.
3. The activity, including the removal of any existing End-User Equipment, must be performed or supervised by a suitably Licensed person in compliance with the relevant standards and legislation.
4. The End-User Equipment must not be installed in a BCA Class 1 or 4 building.

Activity Peak Demand Reduction Capacity

Peak Demand Savings Capacity = (Baseline Input Power × Baseline Peak Adjustment Factor – Input Power × Peak Adjustment Factor) × Firmness Factor

Where:

- *Baseline Input Power*, in kW, is calculated using Equation WH1.1
- *Baseline Peak Adjustment Factor* is found in Table A4
- *Input Power*, in kW, is calculated using Equation WH1.2
- *Peak Adjustment Factor* is found in Table A4
- *Firmness Factor*, as a fraction, is the likelihood that capacity will be available during a system peak event as defined in Table A6.

Equation WH1.1

Baseline Input Power = 0.01 × ComPkLoad

Where:

- *ComPkLoad* is the peak daily (winter) load in MJ/d as recorded in the Product Registry for the zone in which the product is installed.

Equation WH1.2

Input Power = (100 - Annual Energy Savings %) × Baseline Input Power ÷ 100

Where:

- *Annual Energy Savings*, as a percentage, is published on the Product Registry
- *Baseline Input Power*, in kW, is calculated using Equation WH2.1

Lifetime

Table WH1.1

End-User Equipment type	Years
All	12

Activity Definition RF1

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* and *4474.2 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.

Peak Demand Reduction Capacity

Peak Demand Savings Capacity = (Baseline Input Power × Baseline Peak Adjustment Factor – Input Power × Peak Adjustment Factor) × Firmness Factor

Where:

- *Baseline Input Power* is 0.93 kW
- *Baseline Peak Adjustment Factor* is found in Table A4
- *Input Power* is 0 kW
- *Peak Adjustment Factor* is found in Table A4
- *Firmness Factor*, as a fraction, is the likelihood that capacity will be available during a system peak event as defined in Table A6.

Lifetime

Lifetime = 7 years.

Activity Definition RF2

Name of Activity
INSTALL A NEW HIGH EFFICIENCY REFRIGERATED CABINET OR REPLACE AN EXISTING REFRIGERATED CABINET

Eligibility Requirements

1. This activity must be an installation of a new high efficiency Refrigerated Cabinet (RC) or a replacement of an existing Refrigerated Cabinet (whether operational or not) with a high efficiency Refrigerated Cabinet.

Equipment Requirements

1. The End-User Equipment must be a Refrigerated Cabinet (RC) as defined within the terms of the Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020.
2. The refrigerated cabinet must have an Energy Efficiency Index (EEI) below 81, as recorded in the GEMS Registry, with the exception of Integral Ice Cream Freezer Cabinets (class 5) which must have an EEI below 51, as recorded in the GEMS registry.
3. The End-User Equipment must be a registered product based on Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020.

Implementation Requirements

1. The existing End-User Equipment must be removed.
2. The new or replacement End-User Equipment must be installed in its intended place of use and operating.
3. The activity, including the removal of any existing End-User Equipment, must be performed or supervised by a suitably Licensed person in compliance with the relevant standards and legislation

Activity Peak Demand Reduction Capacity

Peak Demand Savings Capacity = (Baseline Input Power × Baseline Peak Adjustment Factor) – (Input Power × Peak Adjustment Factor) × Firmness Factor

Where:

- *Baseline Input Power*, in kW, is calculated using Equation RF2.1
- *Baseline Peak Adjustment Factor* is calculated using Equation RF2.3
- *Input Power*, in kW, is calculated using Equation RF2.2
- *Peak Adjustment Factor* is equal to the Baseline Peak Adjustment Factor
- *Firmness Factor*, as a fraction, is the likelihood that capacity will be available during a system peak event as defined in Table A6.

Equation RF2.1
Baseline Input Power = TEC × af × [Baseline EEI ÷ Product EEI] ÷ 24

Where:

- *TEC* is the *Total Energy Consumption* in kWh/day of the new refrigerated cabinet model as recorded in the GEMS Registry
- *Product EEI* is the Energy Efficiency Index of the new refrigerated cabinet model as recorded in the GEMS Registry
- *Baseline EEI* is defined in Table RF2.1
- *af* is defined in Table RF2.1

Equation RF2.2
Input Power = TEC × af ÷ 24

Where:

- *TEC* is the *Total Energy Consumption* in kWh/day of the new refrigerated cabinet model as recorded in the GEMS Registry
- *af* is defined in Table RF2.1

Equation RF2.3
Baseline Peak Adjustment Factor = Temperature Factor × Usage Factor

Where:

- *Temperature Factor* is defined in Table RF2.2 based on the Product Type
- *Usage Factor* is 1

Table RF2.1

Product Type	Refrigerated Cabinet Product Class (Product Characteristics Code)	AS 1731.14 Product Types	af		Baseline EEI	
					Heavy Duty	*Normal and Light Duty*
1. Integral Refrigerated Display Cabinet	Class 1 (IRH)	HC1, HC2, HC3, HC4, HC5, HC6	1.0		-	130
	Class 2 (IFH)	IHF1, IHF3, IHF4, IHF5, IHF6 (>500l)	1.0		-	92
	Class 7 (IRV)	IVC1, IVC2, IVC3, IVC4 Glass door (M1)	1.0		-	90
	Class 8 (IFV)	IVF1, IVF2, IVF4 Glass door	1.0		-	97
	Class 11 (IRV-4)	IVC4 Glass door (M2)	1.0		-	130
2. Integral Ice Cream Freezer Cabinet	Class 5 (IFH-5)	IHF5, IHF6 (<500 litres)	1.0		-	130
3. Remote Refrigerated Display Cabinet	Class 12 (RRH)	RS6, RS7, RS8, RS9	1.0		-	130
	Class 13 (RRH)	RS13, RS14,	1.0		-	80
	Class 14 (RRV or RRV-2)	RS1, RS2, RS3, RS4, RS5, RS10	1.0		-	91
	Class 15 (RFV)	RS11, RS12, RS15, RS16, RS17, RS18, RS19, RS20	1.0		-	106
4. Gelato or Ice Cream Scooping Cabinet	Class 6 (GSC or ISC)		1.0		-	76
5. Refrigerated Storage Cabinet	Class 3 (SRH)		LD:	1.2	73	71
			ND or HD:	1.0		
	Class 4 (SFH)		LD:	1.1	89	80
			ND or HD:	1.0		
	Class 9 (SRV)		LD:	1.2	91	70
			ND or HD:	1.0		
	Class 10 (SFV)		LD:	1.1	96	80
			ND or HD:	1.0		

Table RF2.2: Refrigerated Cabinet Temperature Factor by Product Type

Product Type	Temperature Factor
Integral Refrigerated Display Cabinet (RDC), or light duty Refrigerated Storage Cabinet (RSC).	1.14
Normal or heavy duty Refrigerated Storage Cabinet (RSC), Ice-Cream Freezer, or Gelato Scooping Cabinet.	0.84
Remote Refrigerated Display Cabinet (RDC).	1.81

Lifetime

Table RF2.3

Refrigerated Cabinet Class	Total Display Area (m^2)	Temperature class	Lifetime (years)
Classes 1 - 6, 9, 10	-	All	8
Classes 7, 8 and 11	<3.3	All	8
Classes 7, 8 and 11	≥3.3	All	12
Classes 12 - 15	-	All	12

Activity Definition SYS1

Name of Activity

INSTALL A NEW HIGH EFFICIENCY VENTILATION OR REFRIGERATION MOTOR

Eligibility Requirements

1. The motor must be installed for use in ventilation or refrigeration applications.

Equipment Requirements

1. The End-User Equipment must be a 3 phase electric motor rated 'high efficiency' within the meaning of Part 5 of the Greenhouse and Energy Minimum Standards (Three Phase Cage Induction Motors) Determination 2019 when tested in accordance with subclause 6.1.3 of IEC60034-2-1.
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 2019.

Implementation Requirements

1. The electric motor must be installed.
2. The electric motor must have a rated output from 0.73kW to <185kW.

Activity Peak Demand Reduction Capacity

Peak Demand Savings Capacity = ((Baseline Input Power × Baseline Peak Adjustment Factor) – (Input Power × Peak Adjustment Factor)) × Firmness Factor

Where:

- *Baseline Input Power*, in kW, is calculated using Equation SYS1.1
- *Baseline Peak Adjustment Factor* is calculated using Equation SYS1.2
- *Input Power*, in kW, is calculated using Equation SYS1.3
- *Peak Adjustment Factor* is equal to the *Baseline Peak Adjustment Factor*
- *Firmness Factor*, as a fraction, is the likelihood that capacity will be available during a system peak event as defined in Table A6.

Equation SYS1.1

Baseline Input Power = Rated Output ÷ Baseline Efficiency

Where:

- *Rated Output* is the rated output of the new electric motor as recorded in the GEMS Registry.
- *Baseline Efficiency*, in %, is:
  - the Full Load Efficiency of the existing motor as determined using IEC60034-2-1 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 SYS1.1, if the existing motor is not listed in the GEMS Registry or if the new electric motor is New End User Equipment. For intermediate values of rated output, the efficiency shall be determined by linear interpolation

Equation SYS1.2

Baseline Peak Adjustment Factor = Temperature Factor × Usage Factor

Where:

- *Temperature Factor* is defined in Table A5 based on the BCA Climate Zone of the Implementation
- *Usage Factor* is 0.6

Equation SYS1.3

Input Power= Rated Output ÷ New Efficiency

Where:

- *Rated Output* is the rated output of the new electric motor as recorded in the GEMS Registry.
- *New Efficiency*, in %, is the Full Load Efficiency of the new electric motor as determined using IEC60034-2-1 and recorded in the GEMS Registry.

Table SYS1.1

Rated Output (kW)	Baseline efficiency (%)				Baseline efficiency (%) (60hz)			
	2 poles	4 poles	6 poles	8 poles	2 poles	4 poles	6 poles	8 poles
0.73	77.4	79.6	75.9	66.2	75.5	78.0	73.0	66.0
0.75	77.4	79.6	75.9	66.2	75.5	78.0	73.0	66.0
1.1	79.6	81.4	78.1	70.8	82.5	84.0	85.5	75.5
1.5	81.3	82.8	79.8	74.1	84.0	84.0	86.5	82.5
2.2	83.2	84.3	81.8	77.6	85.5	87.5	87.5	84.0
3	84.6	85.5	83.3	80.0	87.5	87.5	87.5	85.5
4	85.8	86.6	84.6	81.9	87.5	87.5	87.5	85.5
5.5	87.0	87.7	86.0	83.8	88.5	89.5	89.5	85.5
7.5	88.1	88.7	87.2	85.3	89.5	89.5	89.5	88.5
11	89.4	89.8	88.7	86.9	90.2	91.0	90.2	88.5
15	90.3	90.6	89.7	88.0	90.2	91.0	90.2	89.5
18.5	90.9	91.2	90.4	88.6	91.0	92.4	91.7	89.5
22	91.3	91.6	90.9	89.1	91.0	92.4	91.7	89.5
30	92.0	92.3	91.7	89.8	91.7	93.0	93.0	91.0
37	92.5	92.7	92.2	90.3	92.4	93.0	93.0	91.7
45	92.9	93.1	92.7	90.7	93.0	93.6	93.6	91.7
55	93.2	93.5	93.1	91.0	93.0	94.1	93.6	93.0
75	93.8	94.0	93.7	91.6	93.6	94.5	94.1	93.0
90	94.1	94.2	94.0	91.9	94.5	94.5	94.1	93.6
110	94.3	94.5	94.3	92.3	94.5	95.0	95.0	93.6
132	94.6	94.7	94.6	92.6	95.0	95.0	95.0	93.6
160	94.8	94.9	94.8	93.0	95.0	95.0	95.0	93.6
>160 < 185	95.0	95.1	94.9	93.3	95.4	95.0	95.0	93.6

Lifetime

Table SYS1.2

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

Activity Definition SYS2

Name of Activity

REPLACE AN EXISTING POOL PUMP WITH A HIGH EFFICIENCY POOL PUMP

Eligibility Requirements

1. There must be an existing pool pump installed at the Site 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 motor and any of the following types: single speed, dual speed, multiple speed or variable speed pump unit. The pump unit must have an input power of not less than 100W and not more than 2500W when tested in accordance with AS 5102.1.
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 4.5 star rating when determined in accordance with AS 5102.2.
3. The new End-User Equipment must have a warranty of at least 3 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

Peak Demand Savings Capacity = ((Baseline Input Power × Baseline Peak Adjustment Factor) – (Input Power × Peak Adjustment Factor)) × Firmness Factor

Where:

- *Baseline Input Power, in kW,* is defined using Table SYS2.1
- *Baseline Peak Adjustment Factor* is specified in Table A4
- *Input Power, in kW,* is defined using Table SYS2.2 based on the pool volume and pool pump type
- *Peak Adjustment Factor* is specified in Table A4
- *Firmness Factor,* as a fraction, is the likelihood that capacity will be available during a system peak event as defined in Table A6.

Table SYS2.1 Pool Pump Baseline Input Power

Pool Size	Pool Volume (L)	Baseline Input Power (kW)
Smaller	< 20,000	0.202
	20,000 to 30,000	0.256
Medium	30,001 to 40,000	0.370
	40,001 to 50,000	0.491
	50,001 to 60,000	0.620
Larger	60,001 to 70,000	0.758
	> 70,001	0.830

Table SYS2.2 Pool Pump Input Power for fixed speed and variable or multi-speed pool pumps.

Pool Volume (L)	Pool Pump Energy Star Rating	Input Power (fixed speed) (kW)	Input Power (variable and multi-speed) (kW)
< 20,000	4.5	0.145	0.086
	5	0.129	0.077
	5.5	0.116	0.069
	6	0.103	0.061

	6.5	0.093	0.055
	7	0.083	0.049
	7.5	0.074	0.044
	8	0.066	0.039
	8.5	0.059	0.035
	9	0.053	0.031
	9.5	0.047	0.028
	10	0.042	0.025
20,000 to 30,000	4.5	0.184	0.109
	5	0.164	0.097
	5.5	0.148	0.087
	6	0.131	0.078
	6.5	0.118	0.070
	7	0.106	0.062
	7.5	0.094	0.056
	8	0.084	0.050
	8.5	0.075	0.045
	9	0.067	0.040
	9.5	0.060	0.036
	10	0.054	0.032
30,001 to 40,000	4.5	0.265	0.157
	5	0.237	0.141
	5.5	0.212	0.126
	6	0.189	0.113
	6.5	0.169	0.101
	7	0.152	0.090
	7.5	0.136	0.081
	8	0.121	0.072
	8.5	0.108	0.064
	9	0.097	0.058
	9.5	0.087	0.052
	10	0.078	0.046
40,001 to 50,000	4.5	0.351	0.209
	5	0.314	0.187
	5.5	0.281	0.167
	6	0.251	0.149
	6.5	0.225	0.134
	7	0.201	0.119
	7.5	0.180	0.107
	8	0.161	0.096
	8.5	0.144	0.085
	9	0.129	0.076
	9.5	0.115	0.068
	10	0.103	0.061

50,001 to 60,000	4.5	0.444	0.263
	5	0.397	0.236
	5.5	0.355	0.211
	6	0.317	0.189
	6.5	0.284	0.169
	7	0.254	0.151
	7.5	0.227	0.135
	8	0.203	0.121
	8.5	0.182	0.108
	9	0.162	0.097
	9.5	0.145	0.086
	10	0.130	0.077
60,001 to 70,000	4.5	0.542	0.322
	5	0.485	0.288
	5.5	0.434	0.258
	6	0.388	0.230
	6.5	0.347	0.206
	7	0.310	0.184
	7.5	0.278	0.165
	8	0.248	0.147
	8.5	0.220	0.132
	9	0.199	0.118
	9.5	0.178	0.106
	10	0.159	0.094
> 70,001	4.5	0.594	0.353
	5	0.531	0.316
	5.5	0.475	0.282
	6	0.425	0.252
	6.5	0.380	0.226
	7	0.340	0.202
	7.5	0.304	0.181
	8	0.272	0.162
	8.5	0.243	0.145
	9	0.218	0.129
	9.5	0.195	0.116
	10	0.174	0.103

Lifetime

Lifetime = 12 years.