



Peak Demand Reduction Scheme

Method Guide

November 2024

[PDRS >>](#)

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this Method Guide are:

Carmel Donnelly PSM, Chair

Jonathan Coppel

Sharon Henrick

The Independent Pricing and Regulatory Tribunal

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from [IPART's website](#).

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About this document

Overview

Accredited Certificate Providers (**ACPs**) operating under the Peak Demand Reduction Scheme (**PDRS**) will need to understand and comply with the requirements of the applicable legislation and the conditions in their Accreditation Notice when creating a Peak Reduction Certificate (**PRC**).

The Method Guide provides guidance about the general requirements for the PDRS and specific requirements of each calculation method under the PDRS. It also sets out key requirements that are referred to in the accreditation conditions.

It should be used by:

- Applicants seeking accreditation as a certificate provider to assist them to:
 - understand what is involved in creating a PRC from an activity under the PDRS
 - complete their application for accreditation.
- PDRS ACPs to assist them to understand and comply with their legislative requirements as well as their accreditation conditions when creating a PRC.
- Auditors to assist them in checking an ACP's compliance with PDRS requirements.



This document applies to implementations on or after **1 November 2024**. Previous versions of the Method Guide should be used for earlier implementations. See the 'Which version of the Method Guide applies' section below for more detail.

Purpose

The Method Guide has 2 main purposes. First, it provides general guidance about the PDRS calculation methods. Second, it contains requirements referenced in an ACP's Accreditation Notice^a about customer engagement and representatives as well as the Scheme Administrator's record keeping requirements.

The Method Guide is not legal advice. Applicants and ACPs should read and familiarise themselves with the regulatory framework for participating in the PDRS contained in the applicable legislation:

^a If you're accredited as an ACP, you'll be issued with an Accreditation Notice that sets out the activities for which you're accredited and your accreditation conditions.

- Part 2, Schedule 4A of the *Electricity Supply Act 1995*
- Part 7 of the *Electricity Supply (General) Regulation 2014*, and
- the *Peak Demand Reduction Scheme Rule of 2022*.

ACPs must comply with the applicable legislation and their accreditation conditions when undertaking an activity to create PRCs or face significant penalties.¹

How to use this document

This document is split into the following sections:

Chapters 1 & 2 explain the structure of the scheme and basic information about certificates and certificate creation under the scheme. If you are new to the PDRS, read these sections.

Chapter 3 covers how you become accredited under the scheme. This section is for anyone who will apply for any PDRS accreditation.

Chapters 4–6 cover information about PDRS methods:

- Chapter 4: About the Reducing Demand Using Efficiency Method
- Chapter 5: About the Store and Shift Capacity Method
- Chapter 6: About the Household Annual Demand Response Method.

Chapters 7 & 8 cover the requirements that apply when you are carrying out your activity.

Chapters 9 & 10 cover what you need to do after your implementation.

Acronyms and key concepts

[Appendix A](#) sets out a list of the acronyms referred to in this document as well as a short explanation of key concepts used in the PDRS.

Which version of the Method Guide applies

| Version number | Change description | Date published | Applicable dates for Method Guide |
|----------------|--|------------------|-----------------------------------|
| V1.0 | First published | 14 October 2022 | No longer applicable |
| V1.1 | Updated for changes to activity definition SYS1 and clause 7.3.7(a) of the PDRS Rule commencing 17 February 2023 | 20 February 2023 | No longer applicable |
| V1.2 | Updated to clarify equivalent ESS activities related to water heaters | 26 April 2023 | 14 October 2022 to 31 July 2024 |

| Version number | Change description | Date published | Applicable dates for Method Guide |
|----------------|--|-------------------|--------------------------------------|
| V2.0 | Major changes made for PDRS Rule change, commencing 1 August 2024, including: <ul style="list-style-type: none"> Renaming from RDUE Method Guide to PDRS Method Guide Introducing new methods and battery activities BESS1 and BESS2 Removing activity definitions RF1 and SYS1 and amending RF2, SYS2 and WH1. | 15 July 2024 | 1 August 2024 to 15 September 2024 |
| V2.1 | Minor changes made for PDRS Rule change, commencing 13 September 2024, including: <ul style="list-style-type: none"> Changes to battery warranty requirements for BESS1 and BESS2 Clarifying that multiple batteries are eligible under BESS1 and BESS2 Application of BESS1 co-payment Data that must be provided when registering certificates Updates to BESS1 and BESS2 evidence requirements based on Rule change Minor changes to SYS2 and WH1. We have also: <ul style="list-style-type: none"> Added information about Banned EUE Added requirements for serial numbers for BESS1 and BESS2 Clarified rounding when registering PRCs. | 16 September 2024 | 16 September 2024 to 31 October 2024 |
| V2.2 | Updated to: <ul style="list-style-type: none"> Clarify eligibility and co-payments for batteries (sections 5.2.1, 6.1 and 8.2.5) Clarify who can be the Purchaser (section 7.1) Update links to battery fact sheets (section 8.5.3) Include product information required when registering certificates (section 10.2.1) Outline interim arrangements for evidencing battery installations under BESS1 are registered on the DER Register (Table B.7) Clarify BESS2 evidence requirements for contracts (Table B.8) Update WH1 example calculation to include Capacity Factor (Appendix C.3). | 1 November 2024 | Until updated |

If you are applying to be accredited under the PDRS, or are amending your accreditation to add PDRS activities, you should use the most up-to-date version of the Method Guide. You should check our website periodically to ensure that this version has not been replaced by a newer version of the Method Guide. If you are accredited under the PDRS, or you have an in-progress application to add a PDRS activity or be accredited under the PDRS, we will email you when we update the Method Guide.

1 About the PDRS

This chapter introduces the Peak Demand Reduction Scheme (**PDRS**), its policy and legislative context and sets out the roles and responsibilities of key stakeholders in the scheme.

- The PDRS is one of the schemes under the Energy Security Safeguard.
- The PDRS aims to increase peak demand reduction capacity during hours of peak demand.
- Accredited Certificate Providers can design and implement a Recognised Peak Activity under the PDRS and create Peak Reduction Certificates.
- IPART is appointed as the administrator and regulator of the PDRS. We monitor an Accredited Certificate Provider's compliance with its requirements and have regard to the outcome of reasonable assurance audits that are conducted independent of Accredited Certificate Providers.

1.1 Overview

The PDRS was established to reduce peak electricity demand and pressure on the electricity system in NSW. This is important because reducing peak demand minimises the risk of blackouts or price spikes during hot summer days when electricity usage can suddenly increase, and demand is at its highest.

The PDRS works by providing financial incentives for households and businesses to implement activities that create "peak demand reduction capacity" (i.e. activities that can reduce demand for electricity during the period between 2.30pm to 8.30pm Australian Eastern Standard Time (**AEST**) from 1 November to 31 March). These incentives are passed on to households and businesses by Accredited Certificate Providers (**ACPs**) that can create tradeable certificates, called Peak Reduction Certificates (**PRCs**), from the activity.

Liable electricity retailers and other Scheme Participants have a legislative obligation to buy and surrender PRCs every year to meet their obligations under the PDRS.

1.2 Policy context

The PDRS is one of the schemes under the Energy Security Safeguard (**the Safeguard**).^b The object of the Safeguard is to improve the affordability, reliability and sustainability of energy through the creation of financial incentives encouraging energy saving activities and in the case of the PDRS, create "peak demand reduction capacity".²

The Safeguard is part of the NSW Government's Electricity Strategy and is one of the ways the NSW Government intends to deliver on its Net Zero Plan.^c The PDRS also contributes to NSW by improving the reliability of its electricity system and helps households and businesses in NSW save money on their electricity bills.

The NSW Department of Climate Change, Energy, the Environment and Water (**DCCEEW**) is responsible for developing the policy and legislation underpinning the Safeguard.

1.3 Legislative context

The PDRS has been established under Part 2 of Schedule 4A of the *Electricity Supply Act 1995 (Act)*. The Act sets out the legal framework of the PDRS. The *Electricity Supply (General) Regulation 2014*, made under the Act, sets out in greater detail IPART's responsibilities as the Scheme Administrator and Scheme Regulator of the scheme, including matters related to:

- the accreditation of certificate providers
- accreditation conditions
- PRCs, and
- audits.

The *Peak Demand Reduction Scheme Rule of 2022 (PDRS Rule)*, also made under the Act, sets out the requirements for creating PRCs from activities under the PDRS. This Rule is expected to be amended as it is regularly reviewed by DCCEEW.

This Method Guide applies to implementations that occur on or after 16 September 2024. If you are registering certificates for implementations before 16 September 2024, refer to the relevant Method Guide listed in the 'Which version of the Method Guide applies' section above.

You should make sure you are familiar with the requirements of the legislation and your accreditation conditions as well as the information contained in this Method Guide.

^b The other schemes under the Safeguard include the Energy Savings Scheme (**ESS**) and the Renewable Fuel Scheme (under development).

^c The Net Zero Plan Stage 1: 2020-2030 is the foundation for NSW's action on climate change and goal to reach net zero emissions by 2050.

1.4 Methods under the PDRS

The PDRS Rule sets out calculation methods for determining the number of PRCs that can be created from eligible activities. The Rule includes 3 calculation methods, each with one sub-method:

- The Peak Demand Savings Method, for calculating peak demand reduction capacity created through energy savings during peak times. This method is made up of the Reducing Demand Using Efficiency sub-method (**RDUE Method**).
- The Peak Demand Shifting Method, for calculating peak demand reduction capacity created by shifting electricity demand away from peak times. This method is made up of the Store and Shift Capacity sub-method (**SASC Method**).
- The Peak Demand Response Method, for calculating peak demand reduction capacity that can be activated in response to peak demand events, reducing demand overall. This method is made up of the Household Annual Demand Response sub-method (**HADR Method**).

These methods are discussed in more detail in Chapters 4–6.

1.5 Activities under the PDRS

An activity under the PDRS is called a **Recognised Peak Activity (RPA)**.

An RPA creates capacity to reduce electricity use during the time of peak electricity demand.³ This time is between 2.30pm and 8.30pm AEST (this is equivalent to 3.30pm – 9.30pm Australian Eastern Daylight Time) between 1 November and 31 March.⁴

These activities can be used to create PRCs.

1.5.1 Eligible activities

Under the PDRS, you can design and implement an RPA that:

- involves one or more Activity Definitions⁵
- involves one or more items of End-User Equipment (**EUE**) covered by the Activity Definitions,⁶ and
- is comprised of multiple implementations with the same or different Implementation Dates.⁷

1.5.2 Ineligible activities

There are certain circumstances where an activity is not an RPA, even if you meet all the requirements of an Activity Definition under the PDRS.⁸ These circumstances include where the activity:

- results in the creation of Peak Demand Reduction Capacity by reducing safety levels or permanently reducing production or service levels^d
- contributes to a net increase in greenhouse gas emissions
- is done to comply with any mandatory legal requirements (except for alterations, enlargements or extensions of a BASIX affected development)^e
- is a standard control service or prescribed transmission service by a network service provider, except if the activity is a non-network option^f
- is eligible to create tradeable certificates under the *Renewable Energy (Electricity) Act 2000* (Cth).

1.5.3 RPA design and implementation steps

Steps involved in the design and implementation of an RPA, include:

- becoming an ACP
- ensuring you're the Capacity Holder
- implementing the RPA in accordance with:
 - legislative requirements
 - the specific requirements of the Activity Definition, and
 - your accreditation conditions
- calculating peak demand reduction capacity and PRCs in accordance with the methodology in the PDRS Rule
- auditing PRCs that haven't been registered, and
- registering PRCs and auditing PRCs that have been registered.

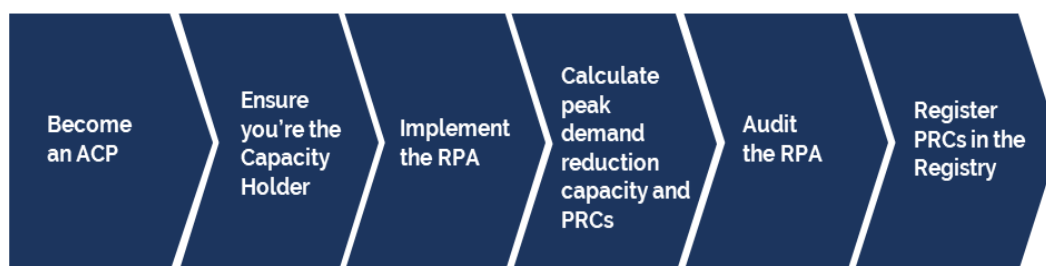
These steps, and the requirements of ACPs under the PDRS and each calculation sub-method, are detailed in this Method Guide.

^d The temporary reduction of production or service levels during the period where peak demand reduction capacity is created by the RPA is not considered "permanent" in this context.

^e As defined in clause 3(1)(c) of the *Environmental Planning and Assessment Regulation 2021*.

^f Standard control services, prescribed transmission services and non-network options are defined in the National Electricity Rules under the *National Electricity (NSW) Law*, which govern the operation of the National Electricity Market.

Figure 1.1 Project steps



1.6 Key participants in the PDRS

The key participants in the PDRS are summarised in Table 1.1.

Table 1.1 Key participants

| Key Participants | Role |
|----------------------------|---|
| DCCEEW | DCCEEW is responsible for developing the policy and legislation underpinning the Safeguard. We work closely with DCCEEW to implement the legislation to achieve the policy objectives. |
| IPART | Our role is to administer the Safeguard and regulate ACPs and Scheme Participants. We accredit you to participate in the PDRS and monitor compliance with your obligations to help ensure each PRC reflects genuine peak demand reduction capacity. We have established and manage the Registry of Certificates where PRC creation, transfer and surrender are tracked. We do not regulate how you buy and sell PRCs in the market. |
| Households and businesses | Households and businesses participate in the PDRS by undertaking activities that lead to increases in peak demand reduction capacity. They are legally the Capacity Holder until they nominate the ACP as the Capacity Holder. The activities must be an Activity Definition under the PDRS Rule. A household or business can't create PRCs unless it is an ACP. |
| ACPs and installers | ACPs are participants in the PDRS who can implement RPAs and create PRCs. Sometimes the ACP will also install the equipment but in many cases they will work with third party installers. ACPs are accountable for ensuring that their installers comply with the scheme requirements. |
| Demand Response Aggregator | Under the HADR method, Demand Response Aggregators (DRAs) contract with householders to combine and provide demand response to a Market Participant or Network Service Provider. The ACP may be a DRA, or contract with a DRA to create certificates on their behalf. |
| Auditors | We use auditors (that you must engage from our Audit Services Panel ⁹), to conduct reasonable assurance audits to check you have complied with all requirements of designing and implementing an RPA and creating PRCs. |
| Scheme Participants | Scheme Participants are mainly energy retailers and distributors that have a legislative obligation to buy PRCs to meet their individual certificate target. |

⁹ Members of the Audit Panel are listed on our [website](#).

Figure 1.2 PDRS stakeholders



2 About Peak Reduction Certificates

This chapter explains what Peak Reduction Certificates (**PRCs**) are, including concepts related to their lifecycle and vintage.

- PRCs are tradeable instruments and are the “currency” of the PDRS.
- One PRC equals 0.1kW of peak demand reduction capacity over one hour.
- PRCs have a lifecycle that includes 3 status types: active, cancelled or expired.
- Each PRC is allocated a vintage year related to the compliance period in which the capacity to reduce peak demand was first made available.
- PRCs expire after 3 years from the beginning of the compliance period during which the capacity is first made available.

2.1 What is a PRC?

PRCs are the “currency” of the Peak Demand Reduction Scheme (**PDRS**) and can be bought and sold in the market.^h The market for the trade of PRCs is created by the obligation of Scheme Participants (typically electricity retailers) to surrender PRCs to us.

PRCs are created from eligible activities that make peak demand reduction capacity available during a compliance period between 1 November and 31 March. Peak demand reduction capacity is measured in kilowatts (kW).

One PRC is equivalent to 0.1 kW of peak demand reduction capacity averaged over one hour between 3.30pm and 9.30pm Australian Eastern Daylight Time (**AEDT**)ⁱ on one day in the compliance period (1 November – 31 March).⁹

The number of certificates that can be calculated from an implementation is based on the:

- reduction capacity averaged over **one** hour
- in each of the **6 hours** between 2.30pm and 8.30pm AEST
- on **one** day within the compliance period.

^h IPART, as the Scheme Administrator and Scheme Regulator, does not regulate how ACPs buy or sell PRCs once created. The commercial arrangements of buying and selling PRCs is a matter for an ACP.

ⁱ The period is defined by the legislation as 2.30pm – 8.30pm Australian Eastern Standard Time.

Example

On 1 September 2022, an ACP implemented an activity under the PDRS.

The activity created the capacity to reduce demand for electricity by an average of **0.2kW** for each of the **6 hours** of peak demand reduction between 2.30pm and 8.30pm AEST.

The activity is eligible to create **12 PRCs** (i.e. 0.2kW x 6 hours x 10) for the 2022-2023 compliance period and for each subsequent year for the lifetime of the implementation.

See section 9.2 and the worked examples in [Appendix C](#) for an explanation about how PRCs are calculated for each Activity Definition including the application of a Network Loss Factor to calculate PRCs.

2.2 The lifecycle of PRCs

PRCs have a lifecycle which includes 3 status types recorded in the Registry of Certificates:

- **Active** - PRCs are tradeable and can be surrendered to meet an obligation
- **Cancelled** - PRCs are no longer tradeable
- **Expired** - PRCs are not tradeable and cannot be surrendered against an obligation.

2.2.1 Active PRCs

A PRC is active from the day it is registered in the Registry of Certificates until it is cancelled or it expires.¹⁰

2.2.2 Cancelled PRCs

A PRC is cancelled once it has been accepted for surrender by IPART.

PRCs are primarily surrendered by Scheme Participants to meet their individual certificate target for a compliance period. However, ACPs can be required to forfeit PRCs if the Scheme Administrator is satisfied that they have been improperly created.¹¹ PRCs can also be surrendered voluntarily.

2.2.3 Expired PRCs

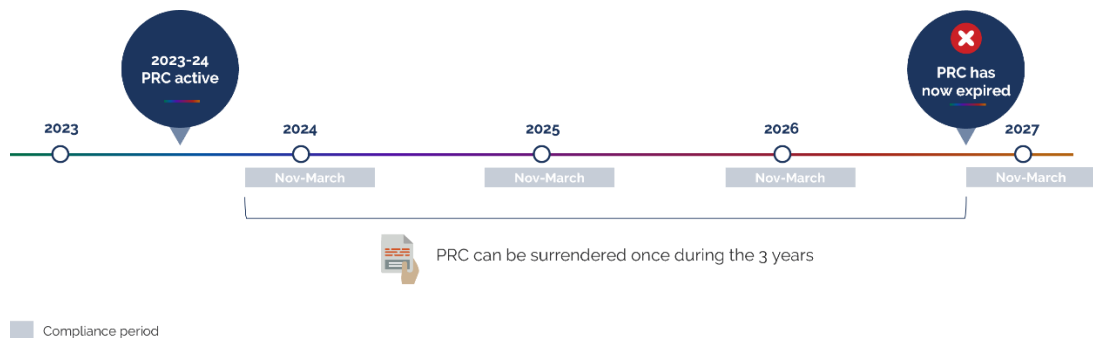
PRCs have a lifespan of up to 3 compliance periods unless sooner cancelled.

This is different from the Energy Savings Scheme (**ESS**), where Energy Savings Certificates (**ESCs**) remain in force until the end of the scheme or until they are surrendered. See section 2.5.

Example – PRC expiry

Using the example above, the 12 PRCs created for the 2022-2023 compliance period are in force until 31 March 2025.

Figure 2.1 PRC lifecycle



2.3 Vintage

Each PRC is allocated a vintage year based on the year that the capacity is created. The allocation occurs based on the first compliance period in which the capacity to reduce peak demand is made available, and the lifetime (in years) of the activity. ACPs can only create one PRC for every 0.1kW of peak demand reduction capacity generated in a compliance period.¹²

Any implementation occurring between 1 April one year and 31 March of the year after will create PRCs of vintages starting with the year after. This is because the capacity from such an implementation is made available for the first time in the 1 November – 31 March compliance period.

Activities under the scheme have lifetimes of more than one year, and create capacity over multiple years, resulting in PRCs of various vintages across their lifetime. This is called **forward creation**. The implications of forward creation are explained in the next section.

Example – PRC vintage

The 12 PRCs created from PDRS activity above had an Implementation Date of 1 September 2022. Peak demand reduction capacity from the installation was first made available in the 2022-2023 compliance period (1 November 2022 – 31 March 2023). These PRCs will be 2023 vintage PRCs.

2.4 Forward creation and vintage

PRCs can be created upfront for future compliance periods over the lifetime of an implementation. Unlike the ESS, the PRCs created upfront do not have the same vintage. Vintage under the PDRS is linked to when the capacity is made available in each compliance period. This means that where an activity has a lifetime of 10 years it will result in PRCs being generated in each of the 10 years. The PRCs will have 10 different vintages.

All PRCs created upfront including those with future vintages will be active from registration and can be both traded and surrendered to meet an obligation under the PDRS.

Example – Forward creation and vintage

The implementation example above has a lifetime of 10 years. Each year the activity creates peak reduction capacity equivalent to **12 PRCs** starting in the 2022-23 compliance period and ending in the 2031-32 compliance period.

This results in the generation of a total of **120 PRCs** over the 10-year lifetime of the activity. That is 12 PRCs in each of 10 vintages starting with **2023 vintage** and ending in **2032 vintage**.

2.5 Forward creation and PRC expiry

Creating PRCs upfront and making them all active has consequences for PRC expiry.

PRCs expire at the end of the third compliance period after the beginning of the compliance period during which the capacity is first made available, unless sooner cancelled.

Future vintage PRC capacity is first made available in their vintage year. For example, a 2027 vintage PRC has capacity made available from 1 November 2026 – 31 March 2027. However, if that PRC is registered in 2023, it can be traded and surrendered from its registration date in 2023. This effectively increases the life of that PRC from 3 compliance periods to 7 compliance periods because it can be surrendered in any one of the years between 2023 (year of registration) and 2029 (year of expiry is 3 years after the beginning of the 2026 compliance period).

This is demonstrated in the example and Table 2.1 below.

Example – Forward creation and PRC expiry

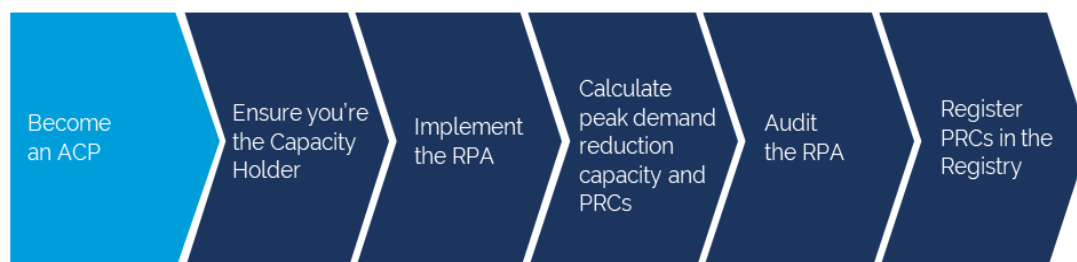
Continuing the same example, the implementation with an Implementation Date of 1 September 2022, creates 120 PRCs spread across its lifetime of 10 years, with 12 PRCs for each year, from **2023 vintage** to **2032 vintage** inclusive. All PRCs are active immediately on registration.

Table 2.1 Example – Forward creation and PRC expiry

| Compliance period capacity made available (1 Nov – 31 March) | Number of PRCs | Vintage | PRC expiry | Number of compliance periods active |
|--|-------------------|---------|---------------|--|
| 2022-2023 | 12 | 2023 | 31 March 2025 | 3 (22-23, 23-24, 24-25) |
| 2023-2024 | 12 | 2024 | 31 March 2026 | 4 (above plus 25-26) |
| 2024-2025 | 12 | 2025 | 31 March 2027 | 5 (above plus 26-27) |
| 2025-2026 | 12 | 2026 | 31 March 2028 | 6 (above plus 27-28) |
| 2026-2027 | 12 | 2027 | 31 March 2029 | 7 (above plus 28-29) |
| 2027-2028 | 12 | 2028 | 31 March 2030 | 8 (above plus 29-30) |
| 2028-2029 | 12 | 2029 | 31 March 2031 | 9 (above plus 30-31) |
| 2029-2030 | 12 | 2030 | 31 March 2032 | 10 (above plus 31-32) |
| 2030-2031 | 12 | 2031 | 31 March 2033 | 11 (above plus 32-33) |
| 2031-2032 | 12 | 2032 | 31 March 2034 | 12 (above plus 33-34) |

3 Become an ACP

IPART is responsible for accrediting Accredited Certificate Providers (**ACPs**). This chapter explains when you may want to consider becoming an ACP under the Peak Demand Reduction Scheme (**PDRS**) and what you'll need to include in your application.



- IPART is responsible for accrediting ACPs.
- Anyone can undertake an RPA, but you must be an ACP if you want to create PRCs.
- Consider becoming an ACP if you want to create PRCs from projects involving applicable equipment.
- You must be accredited in the PDRS if you want to create PRCs, regardless of whether you are accredited under the ESS.
- You'll need to include information in your application about how you collect and keep records, manage your customer engagement and representatives, and prove that you have the right insurance in place.

3.1 Reasons to become an ACP

While anyone can design and implement a Recognised Peak Activity (**RPA**), you can only create Peak Reduction Certificates (**PRCs**) if you're an ACP.³³

You may wish to consider accreditation under the PDRS if you're:

- in the business of regularly installing or replacing End-User Equipment (**EUE**) covered by one or more of the Activity Definitions
- a project developer that wants to work with businesses that install or replace EUE covered by one or more of the Activity Definitions
- a Demand Response Aggregator interested in becoming accredited for BESS2.

If you're already accredited under the Energy Savings Scheme (**ESS**) for the corresponding Activity Definition (see Table 4.1), you may wish to consider accreditation under the Reducing Demand Using Efficiency (**RDUE**) Method as many ESS activities are also activities under the RDUE Method.

If you are implementing a small or one-off project or if your business doesn't have the capacity to meet PDRS requirements, you could consider working with an existing ACP who could create PRCs on your behalf.

3.2 How to become an ACP

You can find information about how to become accredited as an ACP under the PDRS, as well as our [Application for Accreditation Guide](#), on our [Becoming an ACP in the PDRS webpage](#).^j

3.3 What you'll need to include in your application

In your application, you will need to demonstrate that:

- you have appropriate processes and procedures in place for:
 - record keeping, quality assurance and a document register
 - customer engagement and complaints handling
 - engagement, management and training of representatives
- your representatives (as appropriate) hold public liability insurance of at least \$5 million covering the replacement and/or rectification of a customers' property damaged as a result of work performed by the person, and/or
- your representatives (as appropriate) hold product liability insurance of at least \$5 million covering all products used in the RPA.

In addition, if you are applying to be accredited for HVAC1, SYS2, BESS1 or BESS2 you must have a documented risk management policy and risk register for each activity. Applicants for BESS1 and BESS2 must also have internal audit procedures to monitor implementations.

Compliance with these requirements will be audited in accordance with the audit requirements in your Accreditation Notice (see section 10.1). If your processes and procedures are not effective, we may require them to be changed.

3.3.1 Record keeping procedure, quality assurance procedure and a document register

When you apply to become accredited as an ACP, you'll need to show us that you have a documented record keeping procedure, quality assurance procedure and a document register. The information that must be contained in these documents is contained in Table 3.1 below.

^j The [Application for Accreditation Guide](#) provides guidance on how to apply for accreditation as an ACP, how we communicate during the application process and the types of accreditation conditions that may be set.

Effective record keeping is important because incorrect or inadequate collection of documents (i.e. to prove you have met a requirement) may lead to non-compliance with the applicable legislation or your accreditation conditions and may result in you improperly creating PRCs.

The record keeping requirements for ACPs in the PDRS are the same as in the ESS.

Table 3.1 Method Guide Record Keeping Requirements

| Document required | Description of requirements |
|-----------------------------|---|
| Record Keeping Procedure | <ul style="list-style-type: none"> • Details of the step-by-step process of how each document will be obtained, processed, maintained and controlled • The position(s) of the person(s) responsible for each of these steps • A description of where the document will be sourced and how it's identified and recorded (within the relevant information system(s)) • How each document you're responsible for generating will be created, approved and updated • Details of any information systems, databases, and/or spreadsheets used to collate, manage or store documents • Types of documents that will be listed in the document register • How each document in the document register will be identified (via record identification/naming protocols) and where each record is located • The position of the person responsible for each type of record in the document register • Processes for archiving and retrieving documents • A description of how long documents will be retained for (you must keep appropriate records of each RPA for at least 6 years after the record is made)¹⁴ |
| Quality Assurance Procedure | <ul style="list-style-type: none"> • The version control procedures in place for each record • Details of any internal audit and reconciliation procedures you have developed to support your record keeping • The procedure for checking peak demand reduction capacity calculations prior to creation and registration of PRCs • The position of the person(s) who is responsible for performing these actions |
| Document Register | <p>You must keep a register of the documents that you need to collect and retain to prove you have met all the requirements to create a PRC. However, at a minimum they should include documents to prove:</p> <ul style="list-style-type: none"> • the person undertaking the RPA holds the correct insurance (see Table 3.4) • you're the Capacity Holder for the RPA (see Table B.1) • the location of the RPA is in New South Wales (see Table B.1) • if applicable, that the RPA is conducted at a residential or small business site (see Table B.1) • if applicable, that you have disposed of the replaced/removed EUE (see Table B.1) • that you have met the eligibility, equipment and implementation requirements of the applicable Activity Definition (see Tables B.2 to B.8 in Appendix B) • you have met the conditions of your accreditation, including the Method Guide Record Keeping Requirements, Method Guide Customer Engagement Requirements and Method Guide Representative Requirements • the Implementation Date of each RPA (see Table B.1) • the methodology, data and assumptions that you used to calculate peak demand reduction capacity and PRCs (see section 9) |

3.3.2 Customer engagement and complaints handling

Customer engagement is important because if you become an ACP, you and your representatives will be the public face of the PDRS and interact with customers in a range of ways, including:

- marketing PDRS activities
- conducting initial designs and assessment for an activity
- providing quotes
- installing, replacing or removing EUE
- obtaining required documentation (e.g. nomination), and
- providing appropriate after sales customer service.

You must have a documented customer engagement and complaints handling procedure that shows how you will meet the Method Guide Customer Engagement Requirements contained in Table 3.2.

Table 3.2 Method Guide Customer Engagement Requirements

| Document required | Requirements |
|--|---|
| You must have documented processes and procedures in place for customer engagement | <ul style="list-style-type: none"> • You must identify yourself as the ACP (or in the case of the representative, identify that they are representing you as the ACP) in all forms of communication • You must provide the customer with your contact details as the ACP • You must not identify yourself as a representative of the ESS, PDRS, IPART or the NSW Government • Before commencing any work, you or your representative must explain to the customer information about the PDRS, including: <ul style="list-style-type: none"> - how the PDRS works, and providing relevant fact sheets as specified in this Method Guide that the customer should read and understand^k - the contents and function of the Nomination Form and providing a copy to the customer - any mandatory requirements that must be met (e.g. removal of old equipment) - that IPART auditors may request information about the activity • Before or during installation of the EUE, you or your representative must ensure that the customer understands the EUE, including: <ul style="list-style-type: none"> - providing details of the make, model and electrical characteristics of the EUE - explaining and demonstrating the features, installation work and process of installation. |
| You must have documented processes and procedures in place for complaints handling | <ul style="list-style-type: none"> • You must tell the customer about the after sales assistance and support you will provide, including: <ul style="list-style-type: none"> - providing a contact number and complaints resolution process to the customer - the process you have for managing and resolving complaints - ensuring that the customer is satisfied with the product(s) as installed - providing a mechanism for replacement of faulty EUE |

^k Some Activity Definitions (HVAC1, SYS2 and WH1) may also require a fact sheet to be provided to the customer for the corresponding ESS activity.

3.3.3 Engagement, management and training of representatives

If you become an ACP under the PDRS you'll be responsible for the conduct of your representatives. You must ensure they represent you in a way that maintains compliance with the requirements of the PDRS, protects the interests of customers as well as the integrity and reputation of the PDRS (see Table 3.3).

Table 3.3 Method Guide Representative Requirements

| Topic | Requirements |
|-------------------------|---|
| Documented procedure | You must have a documented procedure in place that shows how you will meet the Method Guide Representative Requirements. |
| Effective control | <p>You must ensure that you have effective control over any person undertaking the RPA on your behalf. This includes all activities in the promotion and delivery of the RPA.</p> <p><i>Note: You will have the most effective control over your representatives if you have a legal contract with them before they conduct any activities on your behalf. We will hold you accountable for non-compliance with PDRS requirements regardless of any contract in place.</i></p> |
| Compliance with the law | You must ensure that you and any person undertaking the RPA on your behalf complies with all legislation that relates to the delivery of the RPA. This includes, without limitation, the <i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989</i> (Cth), the <i>Work Health and Safety Act 2011</i> , the <i>Home Building Act 1989</i> and the <i>Fair Trading Act 1987</i> . |
| Record keeping | <p>You must maintain a register of all representatives conducting activities for each RPA. The register must contain the following information:</p> <ul style="list-style-type: none"> • name • contact details • relationship to you (e.g. employee, contractor or business partner) • training completed for the PDRS, including date • other relevant training completed (e.g. WHS), including date • formal qualifications. Licences and certifications (e.g. electrician), including registration/licence numbers • date of employment/commencement • details of any delegated responsibility for processes and tasks involved in designing and implementing the RPA • sites where the representative will act on your behalf |
| Training and support | <p>You must regularly train your representatives to understand:</p> <ul style="list-style-type: none"> • how the PDRS works, including its legislative framework • the RPAs you're undertaking • your internal procedures, especially those regarding collecting documentation to evidence that requirements have been met • the Method Guide Record Keeping Requirements and the Method Guide Customer Engagement Requirements. • other obligations they must comply with in addition to the PDRS (e.g. Australian consumer laws and/or occupational work, health and safety laws). |

3.3.4 Insurance and accreditation

When you apply to become accredited as an ACP, you'll need to show us evidence that the person undertaking the RPA (i.e. you and/or your representative) holds:

- public liability insurance of at least \$5 million, covering the replacement and/or rectification of a customers' property damaged as a result of work performed by the person
- product liability insurance of at least \$5 million, covering all products used in the RPA.

You will need to maintain these insurance policies for the life of the RPA. Compliance with this requirement will be audited in accordance with the audit requirements in your Accreditation Notice (see section 10.1).

Examples of the types of documents you can collect to prove you have met this requirement is contained in Table 3.4 below.

Table 3.4 Examples of evidence that may prove you and your representatives hold insurance

| Requirement | Source of requirement | Examples of evidence that may prove requirement is met |
|---|-----------------------|---|
| That you and/or your representative holds public liability insurance of at least \$5 million | Accreditation Notice | <ul style="list-style-type: none"> • Policy document • Certificate of currency • Letter from insurance company |
| That you and/or your representative holds product liability insurance of at least \$5 million | Accreditation Notice | <ul style="list-style-type: none"> • Policy document • Certificate of currency • Letter from insurance company |

3.3.5 Identifying, monitoring and managing risk

If you are applying to be accredited for HVAC1, SYS2, BESS1 or BESS2 you must have a documented risk management policy specific to the proposed activity. The risk management policy must include reference to any standards or industry accepted risk management principles that have been adopted in the policy. At a minimum the policy must describe how your business:

- identifies and records key risks
- reviews and monitors these risks
- ensures appropriate controls are in place (i.e. strategies to manage these risks and reduce the likelihood or consequence of the risk occurring).

Before applying for accreditation, you must conduct a risk assessment of the proposed activity or activities. Once the risk assessment is complete, you are required to:

- record the outcomes of the risk assessment in a risk register
- submit the completed risk register with your application
- maintain and update the risk register for the duration of the accreditation.

The risk assessment should consider the following key risk areas (as a minimum):

- safety (e.g. incidents that could occur during, or as a result of, the implementation of an activity at a site resulting in injury to employees, representatives or customers)
- fraud (e.g. installers providing false documentation leading to the ACP improperly creating PRCs in contravention of the Act, or undertaking work in contravention of other relevant legislation)
- property damage (e.g. incidents that could occur during, or as a result of, an implementation of an activity at a site resulting in damage to property)
- regulatory (e.g. the ACP undertakes activities in contravention of relevant legislation).

3.3.6 Internal audit procedures

ACPs accredited for Activity Definitions BESS1 and BESS2 must have internal audit procedures to monitor implementations. This includes auditing the work and records provided by contractors and representatives. ACPs must have sufficient processes in place to:

- identify discrepancies between their records and the activities actually occurring at each site, including work and records provided by contractors and representatives
- confirm that controls identified in their risk assessment are effectively mitigating risks.

Internal audit procedures will not replace independent audits that may be required by the Scheme Administrator. However, having robust internal audit procedures may assist ACPs to identify errors before creating PRCs and subsequently streamline independent audits. Robust internal audit procedures should also form an integral part of an ACP's process to review and monitor risks associated with their project.

4 About the Reducing Demand Using Efficiency Method

The Reducing Demand Using Efficiency Method (**RDUE Method**)⁴⁵ incentivises activities that reduce electricity demand during peak times by using energy more efficiently. The method is aligned to activities in the Energy Savings Scheme (**ESS**), so that activities under RDUE are likely to be eligible to create Energy Savings Certificates under the Energy Savings Scheme.

Key points

- Eligible activities under the RDUE Method correspond to existing activities in the ESS.
- Activities create capacity to reduce peak demand by installing appliances that run more efficiently during peak hours.

4.1 Eligible activities

There are five activities, called Activity Definitions, that you can carry out under the RDUE Method (see Table 4.1). These activities:

- correspond with activities in the Energy Savings Scheme (**ESS**), and
- address electricity loads that are likely to be present on the National Electricity Market⁴⁶ during peak times.

PDRS Rule changes apply to some RDUE activities from 1 August 2024. For all implementations with an Implementation Date before 1 August 2024 you should refer to the version of the Method Guide that was current at the Implementation Date. See the 'Which version of the Method Guide applies' section above.

⁴⁶ The National Electricity Market is the interconnected power system that spans New South Wales for the wholesale supply and purchase of electricity.

4.2 Alignment with the ESS

Activities under the RDUE Method have a corresponding activity in the Energy Savings Scheme. Certificates can be created under both schemes for these activities, providing you have the appropriate accreditations. The eligibility, equipment and implementation requirements are mostly aligned between the PDRS and ESS for these activities.

Table 4.1 ESS and PDRS activity references

| End-User Equipment | ESS Activity Definition | ESS Method | PDRS Activity Definition | Name of Activity |
|------------------------------|-------------------------|--|--------------------------|---|
| Residential air conditioners | D16 | Home Energy Efficiency Retrofits | HVAC1 | Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner |
| Commercial air conditioners | F4 | Installation of High Efficiency Appliances for Business | HVAC2 | Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner |
| Heat pump water heaters | F16/D17 ^a | Installation of High Efficiency Appliances for Business / Home Energy Efficiency Retrofits | WH1 | Replace one or more existing hot water boilers or water heaters with one or more air source heat pump water heater systems |
| Refrigerated cabinets | F1.2 | Installation of High Efficiency Appliances for Business | RF2 | Replace an existing refrigerated cabinet with a new high efficiency refrigerated cabinet |
| Residential pool pumps | D5 | Home Energy Efficiency Retrofits | SYS2 | Install a new high efficiency pool pump or replace an existing pool pump with a high efficiency pool pump |

a. Under the PDRS Rule, PRCs cannot be generated from heat pump water heaters installed in a BCA Class 1 or 4 building. This means that implementations undertaken under the corresponding ESS Activity Definition D17 in these building types cannot be used to create PRCs.

Requirements for the RDUE Method are set out in clause 7 and Schedule B of the PDRS Rule.

See Chapters 7–10 for information about implementing activities under this method.

5 About the Store and Shift Capacity Method

The Store and Shift Capacity Method (**SASC Method**) incentivises activities that create capacity to shift demand for electricity away from peak demand periods.

Key points

- The SASC Method currently comprises one activity that involves installing batteries.
- You cannot create certificates for this activity for implementations that occur before 1 November 2024.
- Batteries create capacity to reduce peak demand by storing energy that can be used outside peak times. Multiple batteries may be installed under the SASC Method when they are installed on the same day behind the same meter.

5.1 Eligible activities

There is currently one Activity Definition under this Method: BESS1 – Install a new behind the meter battery energy storage system. Certificates can be created for this activity only where the Implementation Date is on or after 1 November 2024.

5.2 Activity requirements

Requirements for the SASC Method are set out in clause 8 and Schedule C of the PDRS Rule. You will also need to comply with other relevant legislation when implementing your activity.^m

BESS1 implementations must meet all PDRS Rule requirements, including the following requirements specified by the Scheme Administrator:

- Each battery must be listed on the [Clean Energy Council's list of approved batteries](#).
- The installation must be conducted by an installer with Grid-Connected Battery Storage 'Design and Install' or 'Install only' accreditation by [Solar Accreditation Australia \(SAA\)](#). You will also need to provide the installer's accreditation number with SAA when you register your certificates.

^m For instance, you may need developmental consent when installing a battery with a capacity over 20 kWh under the [State Environmental Planning Policy](#). We recommend you check with the relevant council before installation.

See Chapters 7–10 for more information about implementing activities under this method.

5.2.1 Installing multiple batteries

Multiple batteries installed on the same day are eligible under this method if they can be considered a single Battery Energy Storage System as defined in clause 10 of the Rule.

When installing a single battery at a National Metering Identifier, the usable battery capacity of that battery must be greater than 2 kWh and less than 28 kWh. When installing more than one battery, the total combined usable battery capacity of all the batteries being installed at the National Metering Identifier must be greater than 2 kWh and less than 28 kWh in total.

If the total usable battery capacity of the system is 28 kWh or more, then the battery system is ineligible. You cannot create any certificates from the implementation, including for the capacity up to 28 kWh.

For example, installation of 4 batteries that each have a usable battery capacity of 5 kWh (i.e. with a combined usable battery capacity of 20 kWh) is eligible. Installation of 6 batteries that each have a usable battery capacity of 5 kWh (i.e. with a combined usable battery capacity of 30 kWh) is not eligible and no certificates can be created for the implementation.

When determining usable battery capacity, you must use the usable battery capacity for the battery as listed on the Clean Energy Council's [Approved batteries list](#).

Installation of additional battery capacity at a site with an existing battery is also not eligible under the PDRS Rule.

6 About the Household Annual Demand Response Method

The Household Annual Demand Response Method (**HADR Method**) incentivises household demand response activities. These activities provide capacity to reduce demand for electricity in peak demand periods by managing household electricity consumption in response to supply constraints, demand spikes, or price increases in the electricity network.

Key points

- The HADR Method currently comprises one activity that involves signing residential batteries up to a demand response contract.
- You cannot create certificates for this activity for implementations that occur before 1 November 2024.
- This method covers the aggregation of demand response to create virtual power plants.
- Activity Definition BESS2 involves the electricity account holder signing a contract allowing a Demand Response Aggregator to control their residential battery for 3 years.

6.1 Eligible activities

The HADR Method currently includes one Activity Definition: BESS2 – Sign a behind-the-meter battery energy storage system up to a demand response contract. The activity involves the electricity account holder signing a contract allowing a Demand Response Aggregator to control their residential battery energy storage system for 3 years. Certificates can be created for this activity only where the Implementation Date is on or after 1 November 2024.

Requirements for the HADR Method are set out in clause 9 and Schedule D of the PDRS Rule.

BESS2 implementations must meet all PDRS Rule requirements, including the following requirement specified by the Scheme Administrator:

- Each battery must be listed on the [Clean Energy Council's list of approved batteries](#).

The total combined usable battery capacity of the battery energy storage system being signed up to a demand response contract must be greater than 2 kWh and less than 28 kWh. If the total usable battery capacity of the system is greater than 28 kWh, you cannot create any certificates from the implementation, including for the capacity up to 28 kWh.

When determining usable battery capacity, you must use the usable battery capacity for the battery as listed on the Clean Energy Council's [Approved batteries list](#).

See Chapters 7–10 for more information about implementing activities under this method.

6.2 Demand Response Aggregators

Under this activity, the Demand Response Aggregator (**DRA**) is the party that aggregates the demand response capacity of multiple residential batteries. By coordinating many small residential batteries together, they can operate similar to a large generation station, and are known as a virtual power plant (**VPP**).

For activity BESS2, DRAs sign contracts with householders to be able to control their residential batteries as part of a VPP. The battery energy storage system must be able to respond to signals from the National Electricity Market to ensure genuine peak reduction capacity is created.

The DRA must either be a Market Participant or a Network Service Provider, or they must have a contract with a Market Participant or a Network Service Provider to aggregate demand response capacity on its behalf (see section 8.2.6).

As the ACP you may be the DRA, or you may contract with a DRA to create certificates on its behalf. Regardless of your business arrangements, the ACP must be nominated as the Capacity Holder by the account holder, and the DRA is the counterparty to the contract that the householder signs.



If you are working with a DRA to create certificates on its behalf, the DRA and its representatives are considered your representatives for the purpose of the three Method Guide Requirements tables in section 3.3.

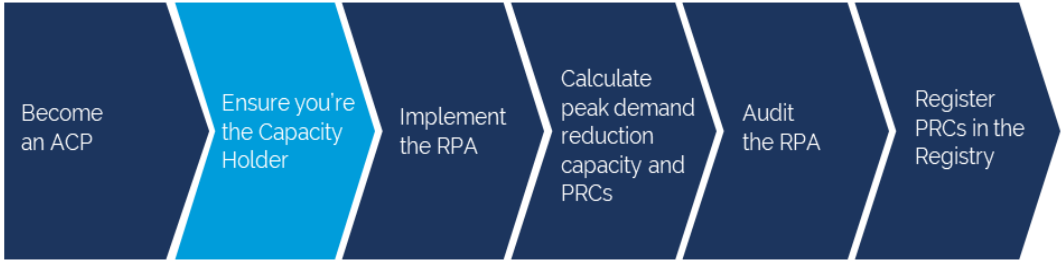
6.3 Three-year contracts

Demand response contracts that are signed as part of BESS2 must be for a term of at least 3 years. The PRCs created for a BESS2 implementation will be for the capacity created for 3 compliance periods.

No PRCs for BESS2 can be created at that same National Metering Identifier (**NMI**) until 3 years from the previous BESS2 Implementation Date, either by the same ACP or by a different ACP.

7 Ensure you're the Capacity Holder

This chapter explains the concept of a Capacity Holder under the Peak Demand Reduction Scheme (PDRS) and what you must do to become the Capacity Holder for an RPA.



- A Capacity Holder is the person that has the right to the capacity to reduce demand.
- A Capacity Holder can nominate their rights to an ACP using the Nomination Form.
- You must collect and keep evidence to prove you're the Capacity Holder for each RPA.

7.1 Determine whether you have the right to the capacity to reduce peak demand

To create PRCs you must be the person with the right to the capacity to reduce peak demand. Under the PDRS, this person is called the "Capacity Holder". The concept of Capacity Holder is like the concept of "Energy Saver" under the Energy Savings Scheme (ESS).

The person that is the Capacity Holder for each Activity Definition is defined under the PDRS Rule and is detailed in Table 7.1. The Capacity Holder is determined as at the Implementation Date.¹⁶

Table 7.1 Capacity Holder for each Activity Definition

| Activity Definition | The Capacity Holder is: |
|-------------------------------------|---|
| HVAC1, HVAC2, RF2, SYS2, WH1, BESS1 | <ul style="list-style-type: none"> • the Purchaser |
| BESS2 | <ul style="list-style-type: none"> • the person who is the account holder of the electricity account for the NMI and has signed the demand response contract with the Demand Response Aggregator. |

Generally, you're the Purchaser if you buy or lease the goods or services that lead to the reduction in electricity demand during the peak period.¹⁷

You cannot be the Purchaser if you purchase or lease the goods or services for the purpose of reselling the equipment,ⁿ or if you are an ACP and you aren't the owner, occupier or operator of the site where the equipment is located.

Example – Capacity Holder

For activities under HVAC1, *Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner*, the Purchaser is typically the owner or occupier of the residence or small business that is installing the new high efficiency air conditioner.

The Purchaser cannot be a person that paid for the installation of the new high efficiency air conditioner if that person does not own, occupy or operate the site. Similarly, the Purchaser cannot be a small business that intends to resell the high efficiency air conditioner to a third-party.

7.2 How to become the Capacity Holder

If you're not the Capacity Holder for an RPA, you'll need to be nominated on or before the Implementation Date of the project.^o This nomination process can occur more than once provided the previous nomination has been revoked before the Implementation Date.

Your Accreditation Notice will require you to comply with the Method Guide Requirements when engaging with your customers, including when seeking their nomination as the Capacity Holder (see Table 3.2 and Table 3.3).

7.2.1 Nomination as Capacity Holder – all activities except BESS2

For all Activity Definitions except BESS2, the Implementation Date is the date the End-User Equipment (**EUE**) is installed.¹⁸ It is the date that all work is done for the installation.

ⁿ Unless the resale of the equipment is included as part of a property sale. See clause 10 of the *Peak Demand Reduction Scheme Rule of 2022*.

^o The nominee must not have withdrawn its consent before the Implementation Date. Clause 4.1(b)(i) of the *Peak Demand Reduction Scheme Rule of 2022*. For all Activity Definitions under the RDUE, SASC or HADR methods, where the ACP demonstrates the nomination, they are also deemed to have consented to being nominated.

Example – Nomination by the Implementation Date

An ACP is accredited for Activity Definitions HVAC1 (residential air conditioning) and SYS2 (residential pool pumps).

The ACP installs a high efficiency air conditioner at a residential property in NSW on 15 November 2022.

The ACP returns 2 weeks later, on 6 December 2022, to install a new high efficiency pool pump at the same residence. The ACP can't complete the entire installation on 6 December and returns on 9 December 2022 to complete the installation.

The Implementation Date for the HVAC1 activity is 15 November 2022 and the Implementation Date for the SYS2 activity is 9 December 2022. The ACP must be nominated for both activities prior to each Implementation Date respectively.

For all Activity Definitions except BESS2, you must be nominated by the original Capacity Holder (see Table 7.1 above) using the Nomination Template we have published on [our website](#).^P

7.2.2 Nomination as the Capacity Holder – BESS2

For BESS2, the Implementation Date is the date the demand response contract is signed by the account holder for the National Metering Identifier at which the battery energy storage system is located.¹⁹

You must comply with the BESS2 Nomination Specification to be validly nominated, though you may use your own forms in any format to comply with the specification. This specification has been designed to facilitate the signing of demand response contracts online.

You may work with a Demand Response Aggregator (**DRA**) to create certificates on their behalf. To be eligible to create certificates, you, not the DRA, must be the nominated as the Capacity Holder by the account holder, otherwise you will not be able to create certificates.

^P See the [Nomination Form](#) on our website. If changes are made to the nomination form without the written consent of the signatories, IPART and/or IPART's auditors may consider the nomination form invalid. This may result in PRCs being deemed to have been improperly created. Clause 4.1(b)(ii) of the *Peak Demand Reduction Scheme Rule of 2022*.

7.3 Proving you're the Capacity Holder at the Implementation Date

7.3.1 Capacity Holder

You must collect and keep appropriate documents to prove you're the Capacity Holder for each RPA.

Examples of the types of documents you can collect is contained in Table B.1.

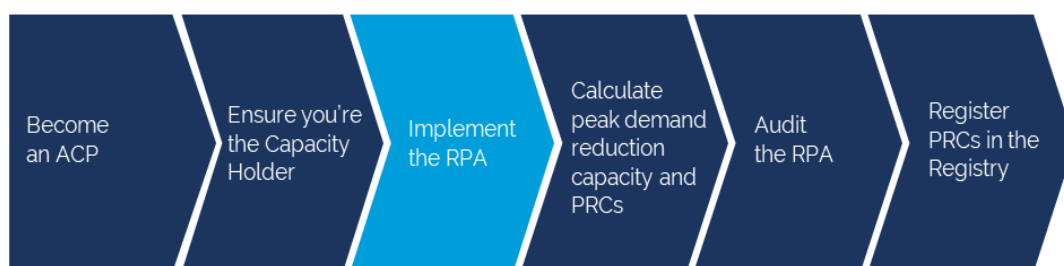
7.3.2 Implementation Date

You must collect and keep appropriate documents to prove the Implementation Date of each activity under the RPA. For all activities except BESS2, the document(s) must clearly show the date the work was conducted (i.e. either the installation or removal) and the address where the work took place. For BESS2, the document(s) must clearly show the date the contract was signed.

Examples of the types of documents you can collect is contained in Table B.1.

8 Implement the RPA in accordance with all requirements

This chapter sets out the requirements that must be met to successfully implement a Recognised Peak Activity (**RPA**) under the Reducing Demand Using Efficiency sub-method (**RDUE Method**), the Store and Shift Capacity sub-method (**SASC Method**), and the Household Annual Demand Response sub-method (**HADR Method**). Records you must collect and keep to prove that you have met the requirements are set out in Appendix B.



- You must comply with legislative requirements, the specific requirements of the activity you're accredited for, as well as the conditions of your accreditation.
- You must collect and keep appropriate documents to prove that you have met all the requirements.

8.1 Overview

You should read and familiarise yourself with the requirements for implementing an RPA. The requirements are contained in:

- Schedule 4A, Part 2 of the *Electricity Supply Act 1995* (**Act**), the *Electricity Supply (General) Regulation 2014* (**Regulation**) and the *Peak Demand Reduction Scheme Rule of 2022* (**PDRS Rule**) (**Relevant Legislation**)
- the specific Activity Definition you are accredited for contained in Schedules B, C, and D of the PDRS Rule, and
- your Accreditation Notice.

You should also understand and comply with any other legislative requirements that may be applicable to the activities you're accredited for (for example, the requirements of consumer law and electrical safety legislation).

Significant penalties may apply if you do not comply with legislative requirements. For more information about our approach to compliance see our ACP Compliance Guide.⁹

8.2 You must comply with the requirements of the Relevant Legislation

8.2.1 RPAs must be conducted in New South Wales

You can only design and implement an RPA at a site located in New South Wales and connected to the electricity transmission or distribution network in New South Wales.²⁰

An RPA may occur at a single site or across multiple sites.

When undertaking RPAs, you must define a site by:

- a street address within New South Wales; or
- another unique identifier, as specified for the relevant implementation that identifies the affected End-User Equipment (**EUE**) (for example, a reference to a registered plan identifier).

You must collect and keep appropriate documents to prove that the site of your RPA meets the requirements.

Examples of the types of documents you can collect is contained in Table B.1.

8.2.2 Certain RPAs must be conducted at Residential or Small Business Sites only

If you're accredited for one of the following Activity Definitions, you can only conduct the RPA at a **residential building or small business site**.²¹

- HVAC1 – Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner
- SYS2 – Replace an existing pool pump with a high efficiency pool pump
- BESS1 – Install a new behind the meter battery energy storage system.

The following activity can be conducted at a **residential building sites only**:

- BESS2 – Sign a behind the meter battery energy storage system up to a demand response contract.

⁹ See the [ACP Compliance Guide](#) on our website.

Residential buildings

The Rule defines a residential building as a building or part of a building classified as a Building Code of Australia (BCA) Class 1, 2 or 4 building, and may include any non-habitable building (BCA class 10a or 10b) on the same site.

Small business sites

A small business site is defined in the PDRS Rule as a site that is entirely occupied by one business and is either:

- classed as a "Small Customer", or
- is a customer of an "Exempt Seller" and has an annual electricity consumption below the "Upper Consumption Threshold" for electricity.²²

Small Customer, Exempt Seller and Upper Consumption Threshold have the same meaning as in the *National Energy Retail Law* (NSW). Applying these meanings, a site will generally be a small business site if it's entirely occupied by a business that is an electricity customer, and that business consumes less than 100MWh of electricity per year (from any source, including on-site generation) at the site. A business will generally be an electricity customer if it's sold electricity by a seller (including an Exempt Seller).^r

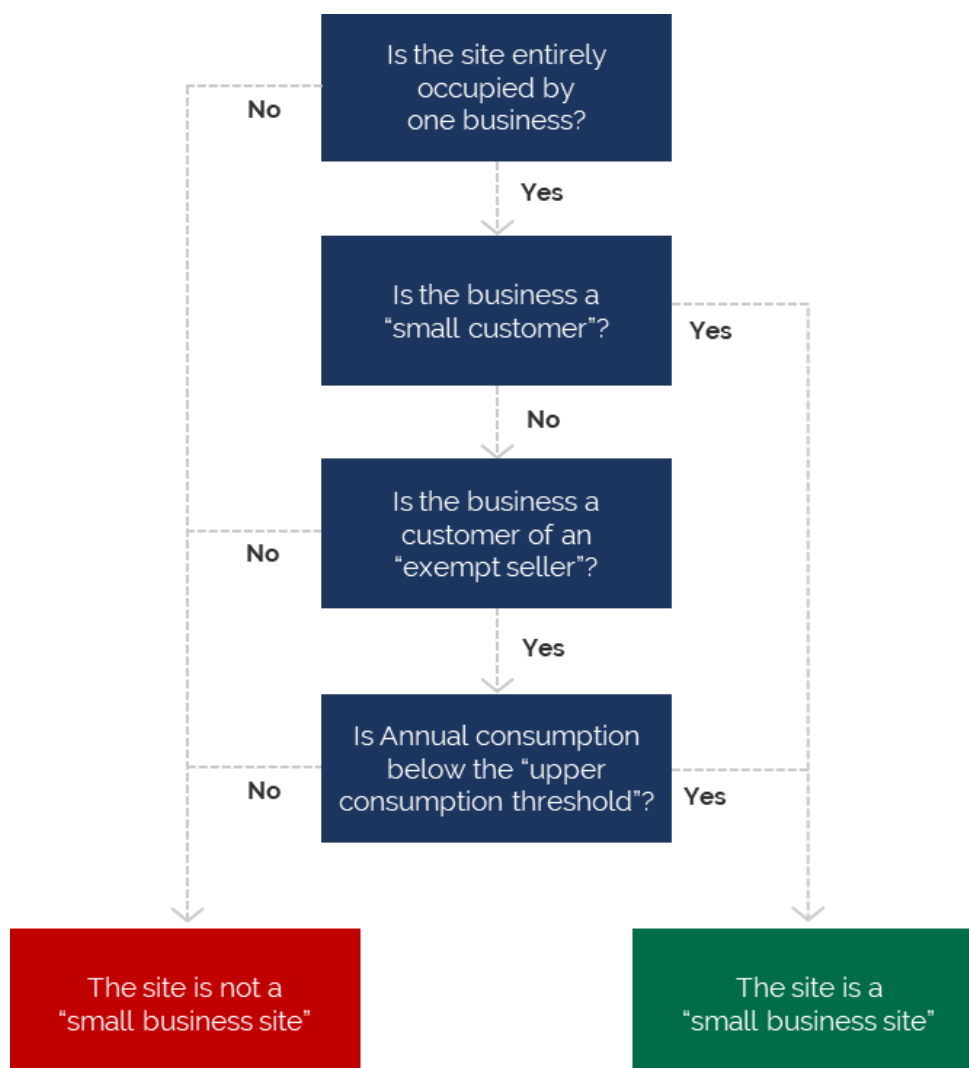
Proving the site is a residential building or small business site

You must collect and keep appropriate documents to prove that each RPA you're implementing is at a residential or small business site (for HVAC1, SYS2 or BESS1) or at a residential site (for BESS2).

Examples of the types of documents you can collect as proof site requirements are met is contained in Table B.1.

^r The Australian Energy Regulator provides guidance on the type of activities that are likely to constitute the sale of electricity, and those activities that are not considered a sale of electricity in its *Retail Exempt Selling Guideline*.

Figure 8.1 How to assess whether a site is a small business site



8.2.3 Certain RPAs cannot be conducted at residential buildings

For the following Activity Definitions, you cannot conduct the RPA at a residential building:²³

- HVAC2 – Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner
 - This activity may be carried out in a residential building only when it is the replacement of an existing air conditioner in a centralised system or in the common areas of a BCA Class 2 building
- WH1 – Replace one or more existing hot water boilers or water heaters with one or more air source heat pump water heater systems
- RF2 – Replace an existing refrigerated cabinet with a new high efficiency refrigerated cabinet.

8.2.4 Old EUE must be correctly disposed of or recycled

The RDUE Method covers activities that involve replacing and removing EUE, including:

- air conditioning equipment (HVAC1 and HVAC2)
- hot water boilers and water heaters (WH1)
- refrigerated cabinets (RF2)
- pool pumps (SYS2).

For an activity to be considered an RPA, you must not refurbish, re-use or re-sell the EUE that is replaced or removed.²⁴ This is so the inefficient equipment is not installed elsewhere.

You're responsible for disposing of the EUE in accordance with applicable NSW and Commonwealth law. If the EUE contains refrigerants (e.g. air conditioners, refrigerators and freezers), you must obtain evidence that refrigerants have been disposed of or recycled.²⁵

If you're undertaking an activity that involves replacing or removing EUE, you must collect and keep appropriate documents to prove that the old EUE is disposed of appropriately.

Examples of the types of documents you can collect is contained in Table B.1 where relevant.

8.2.5 The minimum co-payment amount has been paid

For activity BESS1 the purchaser is required to pay a net amount towards the cost of the implementation (**minimum co-payment**).²⁶ When installing multiple batteries as a single system the minimum co-payment must be paid for each Battery Energy Storage System (as defined in clause 10 of the Rule) installed at a NMI. See section 5.2.1 for more details about installing multiple batteries.

The minimum co-payment must not be reimbursed, credited by a third party, or made in part or in full by a non-cash inducement or in-kind payment. The minimum co-payment must be paid before the ACP can register PRCs. Proof that the payment was made before the PRC registration date will be checked at audit.

The PDRS Rule specifies that the minimum co-payment requirement does not apply to implementations that are delivered through an approved low-income energy program or an exempt energy program.

The documents you must collect as proof the co-payment has been paid are set out in Table B.7.

8.2.6 Demand response contract is with a Demand Response Aggregator

For the BESS2 activity under the HADR Method, the account holder at the NMI must sign a contract with a Demand Response Aggregator (**DRA**).²⁷ You, as the ACP, may be the DRA yourself, or you may work with a DRA to create certificates on their behalf.

A person is a DRA only if:²⁸

- they aggregate demand response capacity, and are either a Market Participant or a Network Service Provider, or
- they have been engaged in a contract with a Market Participant or Network Service Provider to aggregate demand response capacity (and related activities) on their behalf.

Market Participant and Network Service Provider are defined respectively in clauses 2.4 and 2.5 of the [National Electricity Rules](#).

You will need to demonstrate that the counterparty to the demand response contract is a DRA. Examples of documents you can collect to prove that the counterparty is a DRA are set out in Table B.8.

8.3 You must comply with the requirements of the Activity Definition you're accredited for

Each of the Activity Definitions in Schedules B, C and D contain activity-specific eligibility, equipment, and implementation requirements.

Where applicable, you must ensure:

- the eligibility requirements for the relevant Activity Definition are met immediately prior to the Implementation Date of the project²⁹
- each item of installed EUE meets all the Equipment Requirements,³⁰ and
- the completed implementation satisfies all the relevant implementation requirements.³¹

Examples of the types of documents you can collect to prove you have met the relevant eligibility, equipment and implementation requirements for each Activity Definition are contained in Tables B.1 to B.8 in Appendix B.

8.4 You must comply with the requirements of your Accreditation Notice

When you're accredited as an ACP, you're issued an Accreditation Notice that sets out the activities you're accredited for, and the conditions imposed on your accreditation.³² Your Accreditation Notice will state your requirements for auditing PRCs (see section 10.1), the type and amount of insurance you must hold (see section 3.3.4) and any additional conditions applicable to your accreditation. Your Accreditation Notice will also state that you need to comply with the following requirements set out in this Method Guide:

- Method Guide Record Keeping Requirements (see Table 3.1)
- Method Guide Customer Engagement Requirements (see Table 3.2)
- Method Guide Representative Requirements (see Table 3.3).

You should carefully review your Accreditation Notice as it contains mandatory requirements with which you must comply.

8.5 You must comply with the requirements in this Method Guide

This section sets out obligations that we intend to generally impose as conditions on any accreditation that includes Activity Definition BESS1 or BESS2.

8.5.1 You must provide your monthly implementation data

When you register PRCs you need to provide us with certain information that supports your claim that the implementation meets the requirements of the PDRS. This information is known as implementation data (see section 10.2.1). For BESS1 and BESS2 activities only, you must provide your implementation data to us by the 15th day of each calendar month for all implementations that occurred in the previous calendar month. You must provide this data regardless of whether you have registered PRCs for these implementations.

For example, the implementation data for any implementations that occurred in April must be provided to us by 15 May of the same year.

When you upload your monthly implementation data, you must also have and keep geo-tagged photos and any other evidence that you are required to keep under the evidence requirements listed in Table B.1, Table B.7 and Table B.8.

8.5.2 You must provide evidence to the Scheme Administrator on request

For BESS1 and BESS2 activities only, you must provide any of the geo-tagged photographs related to an implementation that you've collected under the evidence requirements listed in Table B.7 and Table B.8 if we request it. You must provide this evidence within 7 days of receiving our request. This request may come before certificate registration.

We will request you to provide this information as part of our compliance activities to ensure that battery activities are being conducted in compliance with the Rule and relevant standards and legislation.

8.5.3 You must provide relevant fact sheets to the customer

You must provide fact sheets to the customer upon quotation under the Method Guide Customer Engagement Requirements (see Table 3.2) for the following activities:

- BESS1 (Install a new behind the meter battery energy storage system) – [BESS1 Fact Sheet](#)
- BESS2 (Sign a behind-the-meter battery energy storage system up to a demand response contract) – [BESS2 Fact Sheet](#).

This requirement aims to help customers make informed decisions about installing a battery or signing a demand response contract under the scheme.

Examples of how you can evidence meeting this requirement are provided in Table B.7 and Table B.8.

8.5.4 You must collect battery serial numbers for BESS1 and BESS2

You must collect and keep the serial numbers of all batteries for all BESS1 and BESS2 implementations. You must keep this information in such a way, and in such a format, that you are able to easily and quickly identify batteries by their serial number (for example, batteries that are the subject of a product recall). You may also be asked to provide this information to the Scheme Administrator as part of a Banned EUE Notice under the scheme rules. See section 8.6 for more information.



You are required to collect and keep this information under the Record Keeping Requirements condition of any BESS1 or BESS2 accreditation.

8.6 You must comply with notices from the Scheme Administrator

8.6.1 You must not create certificates for banned equipment

If the Scheme Administrator bans End-User Equipment by publishing a notice, you must not create certificates for implementations that involve the installation of the End-User Equipment specified in the notice. For example, the Scheme Administrator may ban equipment that is subject to a product recall under the Australian Consumer Law.

The notice banning equipment may also require you to provide certain information to the Scheme Administrator. For example, you may be asked to provide the serial numbers of equipment that is the subject of a product recall.

8.7 Compliance checklist

Before implementing an RPA, check you're meeting the requirements of the Relevant Legislation, the Activity Definition you're accredited for and your Accreditation Notice and that you have records to prove this compliance (see Table B.1).

Table 8.1 Compliance checklist

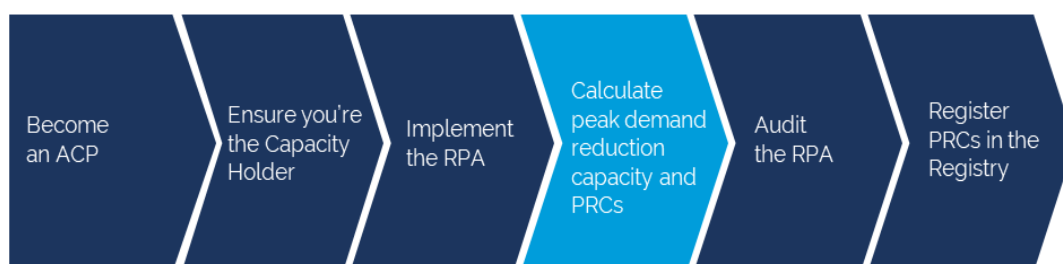
| RPA Stage | Checklist | Source of requirement | Method Guide section reference |
|---|--|-----------------------|--------------------------------|
| Developing RPA business opportunities (marketing) | Do I know who is representing me at each site? Is this person in my representative register? | Accreditation Notice | Section 3.3.3 |
| | Has the person acting on my behalf received appropriate training? | Accreditation Notice | Section 3.3.3 |
| | Is my representative telling the customer the right things? | Accreditation Notice | Section 3.3.2 |
| Initial feasibility assessment | Is the site in NSW? | PDRS Rule | Section 8.2.1 |
| | Is the site connected to the electricity network in NSW? Do I have records to prove this? | PDRS Rule | Section 8.2.1 |
| | For HVAC1, SYS2 and BESS1, is the site a residential building or small business? For BESS2, is the site a residential site? Do I have records to prove this? | PDRS Rule | Section 8.2.2 |
| | Does the site meet the eligibility requirements of the Activity Definition? Do I have records to prove this? | PDRS Rule | Section 8.3 |

| | | | |
|-------------------------------|---|----------------------|---------------------------------|
| | Am I the Capacity Holder and if not, do I know how I will become the Capacity Holder (i.e. through nomination or deeming)? Do I have records to prove this? | PDRS Rule | Section 7.1 |
| Before I get to site | Does the person doing the work hold suitable licences? Do I have records to prove this? | PDRS Rule | Section 3.3.3 |
| | Does the person doing the work hold the requisite insurance? Do I have records to prove this? | Accreditation Notice | Section 3.3.4 |
| When I'm on site | Does the customer know who the ACP is and that my representative is acting on my behalf? | Accreditation Notice | Section 3.3.2 |
| | Does the customer have my contact details? | Accreditation Notice | Section 3.3.2 |
| Before I commence any work | Have I or my representative explained how the PDRS works and provided any relevant fact sheets? | Accreditation Notice | Section 3.3.2 and section 8.5.3 |
| | Have I or my representative explained the contents and function of the nomination, received a signed version and provided a copy to the customer? | Accreditation Notice | Section 3.3.2 and section 7.2.1 |
| | Where applicable, have I or my representative explained to the customer that old EUE will need to be removed? | Accreditation Notice | Section 3.3.2 |
| | Does the customer know that IPART auditors may request information about the project in the future? | Accreditation Notice | Section 3.3.2 |
| When I start work | Does the new EUE comply with the equipment and implementation requirements of the Activity Definition? Do I have records to prove this? | PDRS Rule | Section 8.3 |
| When I have finished the work | Is the work acceptable to the customer? | Accreditation Notice | Section 3.3.2 |
| | Does the customer have my contact details for after sales service and complaints? | Accreditation Notice | Section 3.3.2 |
| | Do I have evidence to show what date the project was finished (i.e. to prove the Implementation Date?) | PDRS Rule | Section 7.3.2 |
| | Where applicable, has old EUE been correctly disposed of or recycled? | PDRS Rule | Section 8.2.4 |

9 Calculate peak demand reduction capacity and PRCs

If you have complied with all requirements for designing and implementing a Recognised Peak Activity (**RPA**), you can calculate peak demand reduction capacity and the amount of Peak Reduction Certificates (**PRCs**) from each project.

This chapter explains what a PRC is and how it's calculated for RPAs.



- PRCs can be created up to 6 months from the end of the compliance period in which capacity is made available and are active for 3 compliance periods.
- PRCs are calculated using equations in the PDRS Rule.

9.1 Timing of PRC creation

9.1.1 You must create PRCs within 6 months after the end of the compliance period

ACPs must create PRCs within 6 months after the end of the compliance period in which the peak demand reduction capacity is made available.³³



Example – PRC creation and timing

On 1 September 2022, an ACP installed an air conditioner at a small business under Activity Definition HVAC1.

The air conditioner created the capacity to reduce demand for electricity by an average of **0.2kW** for each of the **6 hours** of peak demand reduction between 2.30pm and 8.30pm AEST.

The installation of the air conditioner is eligible to create **12 PRCs** for the 2022-2023 compliance period and for each year after for the lifetime of the project.

120 PRCs (12 PRCs x 10 years of forward creation) are eligible to be created from the project. As the end of the compliance period is 31 March 2023, the ACP must create at least the first 12 PRCs by 30 September 2023.

9.1.2 Additional restrictions for registering PRCs for BESS2

Where PRCs have previously been created for a NMI for an Implementation of Activity Definition BESS2 (Sign a behind the meter battery energy storage system up to a demand response contract), an ACP cannot create PRCs for another BESS2 Implementation at that NMI until 3 years from the previous Implementation Date.³⁴

Once you upload your Implementation Data to our online portal The Energy Security Safeguard Application (**TESSA**).⁵ TESSA will check whether there have been any BESS2 implementations at the same NMIs by other ACPs. If there have been other implementations, then it will prevent your registration.



Example – BESS2 PRC registration restrictions

On 1 December 2024, a householder signs their battery up to a demand response contract for 3 years. The ACP creates PRCs from the Implementation for the 2024-2025 to 2026-2027 compliance periods.

On 1 September 2027, the householder signs their battery up to a demand response contract for 3 more years. The ACP cannot create PRCs until 1 December 2027, which is 3 years after the previous Implementation Date.

9.2 Calculating PRCs

9.2.1 Equations used to calculate PRCs

The *Peak Demand Reduction Scheme Rule of 2022 (PDRS Rule)* sets out the equations to calculate the number of PRCs that can be created from an implementation.

Equation 1 is used to calculate the number of PRCs based on the Peak Demand Reduction Capacity and the network loss factor.³⁵

Peak Demand Reduction Capacity for Equation 1 is calculated using the following equations:

⁵ TESSA can be accessed [here](#).

- Equation 2a for RDUE Method activities – calculates Peak Demand Reduction Capacity using Peak Demand Savings Capacity, summer peak demand reduction duration and lifetime of the Activity Definition³⁶
- Equation 2b for SASC Method activities – calculates Peak Demand Reduction Capacity using Peak Demand Shifting Capacity, summer peak demand reduction duration and lifetime of the Activity Definition³⁷
- Equation 2c for HADR Method activities – calculates Peak Demand Reduction Capacity using Peak Demand Response Capacity, summer peak demand reduction duration and lifetime of the Activity Definition.³⁸

Each Activity Definition contains specific equations that calculate the inputs to the above equations.

Worked examples for each Activity Definition are provided in Appendix C.

9.2.2 You can develop your own calculation tool

You can develop your own calculation tool to assist in calculating PRCs. Spreadsheets and tools used to calculate peak demand reduction capacity must be developed in accordance with the most recent requirements of the method under the PDRS Rule and maintained to help ensure they are up to date with such requirements.

9.2.3 Collection of documents to prove inputs to calculations

You will need to collect and keep documents to support the values you have used in the PRC calculations.

9.3 Equations and explanations

9.3.1 Equation 1



Equation 1

Number of PRCs = **Peak Demand Reduction Capacity** x
Network Loss Factor x 10

Peak Demand Reduction Capacity, in kilowatts, is calculated using Equation 2a, 2b or 2c.

The Network Loss Factor is a factor that accounts for energy losses in the network and is determined using values from Table A3 of the PDRS Rule.

9.3.2 Equation 2a (RDUE Method)

Equation 2a



$$\text{Peak Demand Reduction Capacity} = \frac{\text{Peak Demand Savings Capacity} \times \text{Summer Peak Demand Reduction Duration}}{\text{Lifetime}}$$

Peak Demand Savings Capacity is calculated using an activity-specific peak demand savings capacity equation set out in the PDRS Rule (see example below).

The Summer Peak Demand Reduction Duration (6 hours) is based on the peak demand reduction period of 2.30pm to 8.30pm AEST.

Lifetime is lifetime of the End User Equipment as set out in each Activity Definition in the PDRS Rule.

9.3.3 Equations for Peak Demand Savings Capacity (RDUE Method)

Equations in RDUE Activity Definitions



$$\text{Peak Demand Savings Capacity} = ((\text{Baseline Input Power} \times \text{Baseline Peak Adjustment Factor}) - (\text{Input Power} \times \text{Peak Adjustment Factor})) \times \text{Firmness Factor}$$

$$\left(\begin{array}{cc} \text{Baseline Input Power} & \text{Input Power} \\ \times & \times \\ \text{Baseline Peak Adjustment Factor} & \text{Input Peak Adjustment Factor} \end{array} \right) - \left(\begin{array}{cc} \text{Input Power} & \text{Input Power} \\ \times & \times \\ \text{Input Peak Adjustment Factor} & \text{Input Peak Adjustment Factor} \end{array} \right) \times \text{Firmness Factor}$$

Peak Demand Savings Capacity is made up of:

- The difference between the baseline power put into an average reference product (called the “baseline input power”) and the power put into the new product (called the “input power”). These values are both adjusted to consider conditions such as temperature that are typical of a summer peak demand event.
- A “firmness factor”, representing the likelihood of peak demand reduction capacity being both available and able to contribute to reducing peak demand. The firmness factor is 1 for all current activities.

9.3.4 Equation 2b (SASC Method)

Equation 2b



Peak Demand Reduction Capacity = **Peak Demand Shifting Capacity** x Summer Peak Demand Reduction Duration x Lifetime

Peak Demand Shifting Capacity is calculated using an activity specific peak demand shifting capacity equation set out in the PDRS Rule (see example below).

The Summer Peak Demand Reduction Duration is **6 hours** and is based on the peak demand reduction period of 2.30pm to 8.30pm AEST.

Lifetime is lifetime of the End User Equipment as set out in each Activity Definition in the PDRS Rule.

9.3.5 Equation for Peak Demand Shifting Capacity (SASC Method)



Equation in SASC Activity Definition

Peak Demand Shifting Capacity = Demand Shifting Component x Firmness Factor

Peak Demand Shifting Capacity is made up of:

- The "demand shifting component" is the capacity that is created that can shift demand away from the peak period.
- A "firmness factor" is the likelihood of capacity being available and able to contribute to reducing peak demand. The firmness factor is 1 for all current activities.

9.3.6 Equation 2c (HADR Method)

Equation 2c (HADR Method)



Peak Demand Reduction Capacity = **Peak Demand Response Capacity** x Summer Peak Demand Reduction Duration x Lifetime

Peak Demand Response Capacity is calculated using an activity specific peak demand shifting capacity equation set out in the PDRS Rule (see example below).

The Summer Peak Demand Reduction Duration is **6 hours** and is based on the peak demand reduction period of 2.30pm to 8.30pm AEST

Lifetime is lifetime of the End User Equipment as set out in each Activity Definition in the PDRS Rule.

9.3.7 Equation for Peak Demand Response Capacity (HADR Method)



Equation in HADR Activity Definition

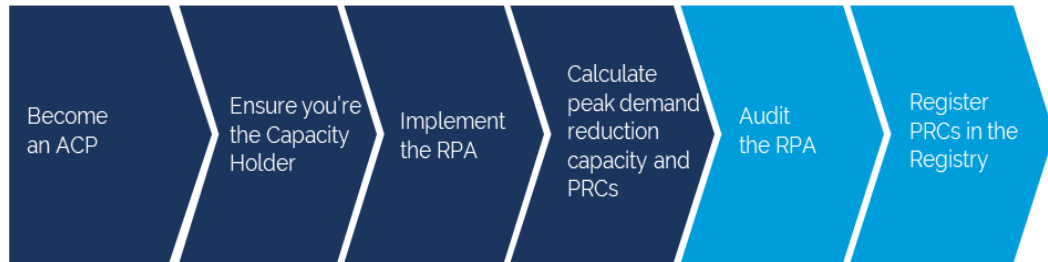
Peak Demand Response Capacity = Demand Response Component x Firmness Factor

Peak Demand Response Capacity is made up of:

- The “demand response component” is the additional capacity that is unlocked through the coordination of multiple batteries by a Demand Response Aggregator.
- A “firmness factor” is the likelihood of capacity being available and able to contribute to reducing peak demand. The firmness factor is 1 for all current activities.

10 Next steps in the project cycle

Depending on your accreditation conditions you may be required to conduct an audit of your Recognised Peak Activity (**RPA**) before you create Peak Reduction Certificate (**PRCs**) in the PRC registry (called the Registry of Certificates). This chapter explains these next steps in the RPA project cycle.



- Your accreditation conditions will determine whether you're required to audit your RPA before or after you create PRCs.
- Audits must be performed by a member of the Audit Panel at your cost.
- You must create, transfer or surrender PRCs in accordance with the relevant procedure.

10.1 You may need to have your RPA audited

Auditing of Accredited Certificate Providers (**ACPs**) is one of the ways we monitor compliance under the PDRS.

Your Accreditation Notice sets out when you need to engage an auditor and the scope of the audit.³⁹ We may also conduct an audit of your participation in the PDRS at any time. For RDUE accreditations, if you're also an ACP under the Energy Savings Scheme, we will try and align your audit requirements under both schemes, where possible.

We use the audit process to check that you have complied with all the requirements for your ongoing eligibility to participate as an ACP and that the PRCs you have created (or are proposing to create) reflect real and accurate peak demand reduction capacity.

Audits must be performed by an approved member of the Audit Services Panel^t and you're responsible for negotiating the commercial arrangements and paying the costs of the audit. Panel members have been assessed by us to check that they hold the necessary qualifications to conduct reasonable assurance audits.

^t Members of the Audit Panel are listed on our [website](#).

We have prepared an ACP Audit Guide^u to help you understand the requirements and processes relating to audits under the Safeguard.

10.2 Creating, transferring and surrendering PRCs

10.2.1 Creating PRCs

We have established a Registry of Certificates⁴⁰ which can be accessed in our online portal [TESSA](#).^v

Provided an ACP has complied with the requirements of an RPA as set out in the applicable legislation and the conditions of its accreditation, an ACP can apply to register PRCs from its RPAs. A PRC has no effect until the Scheme Administrator registers the creation of the PRC in the Registry of Certificates.⁴¹

When you register your PRCs on TESSA, you must provide Implementation Data for each Implementation. For more information about how to upload your Implementation Data and in what format, please refer to the guidance information we have provided on our website.^w Implementation Data required to be uploaded in TESSA includes:⁴²

- the ACP identifier
- the RPA identifier
- the address(es) of the Site or Sites where the Implementation(s) took place
- any other identifiers required to identify the Site or Sites where the Implementation(s) took place
- where the Implementation Date is on or after 1 November 2024, the National Metering Identifier (NMI) of the Site connection point(s) to the Electricity Network
- the Implementation Date of the Implementation(s)
- the Network Factor applied for each Implementation
- the Australian Business Number (if any) of the entity utilising the End-Use Service
- the cost to the person who pays for the goods or services that comprise the Implementation, excluding GST
- the type of the End-Use Service for which Peak Demand Reduction Capacity was created in accordance with Table A1 of Schedule A of the PDRS Rule
- the Business Classification of the entity utilising the End-Use Service in accordance with Table A2 of Schedule A of the PDRS Rule
- the Method or sub-method and Activity Definition, where relevant, used to calculate the Peak Demand Reduction Capacity

^u The [ACP Audit Guide](#) is available on our website.

^v TESSA can be accessed [here](#).

^w Guidance documentation can be accessed [here](#).

- the Peak Demand Reduction Capacity calculated under each Activity Definition that is used for the Implementation,
- for BESS1 only, the name of the installer, and their accreditation number as shown on the approved installer list specified by the Scheme Administrator
- when registering certificates on or after 1 August 2024 for certain RDUE activities, product details, including brand and model number^x
- where the Implementation Date is on or after 1 November 2024, the licence type and number of each person who performs/supervises work that must be performed/supervised by a licensed person, and
- any other data providing evidence of Peak Demand Reduction Capacity from the Implementation as published, from time to time, by the Scheme Administrator.

You may submit multiple implementations that use the same Activity Definition in a single application to register certificates.⁴³ The capacity created from each implementation will be converted to PRCs using Equation 1 and then summed.⁴⁴

Where an application to register the creation of PRCs is made for an amount of Peak Demand Reduction Capacity (as adjusted by the Network Loss Factor) that is not divisible by 0.1 without leaving a remainder, that amount of Peak Demand Reduction Capacity is to be rounded down to the nearest 0.1 kW.⁴⁵

Peak Demand Reduction Capacity is to be apportioned as equally as possible between all compliance periods which begin during the lifetime of an implementation provided that each compliance period:

- is allocated a whole number of PRCs, and
- is allocated a number of PRCs that is within one PRC of the annual average number of PRCs created over the lifetime of the implementation.

If the whole number of PRCs cannot be apportioned equally across all compliance periods, earlier compliance periods are allocated higher numbers of PRCs than later compliance periods.⁴⁶



Example – Allocation of PRCs to vintages

An implementation under Activity Definition HVAC1 has a lifetime of **10 years**.

Over its lifetime, the implementation results in total peak demand reduction capacity of 1090.1 kW (**10,901 PRCs**).

The PRCs are allocated such that 1091 PRCs are allocated to the first compliance year and 1090 PRCs are allocated to each of the 9 compliance years that follow.

^x See the CSV Specification on our [Uploading Implementation Data to TESSA](#) webpage for details.

You must pay the registration fee when you apply to register PRCs.^y An invoice will be generated by TESSA as part of your application to register PRCs. The registration fee is adjusted on 1 November each year.⁴⁷

10.2.2 Transferring and surrendering PRCs

Once PRCs are registered, you may apply to transfer them to another party through TESSA.^{z 48}

You may be required to surrender PRCs^{aa 49} if you have:

- improperly created PRCs, or
- are in breach of your accreditation conditions.

We may require you to set aside PRCs under the terms of an undertaking signed at the time of accreditation.^{bb}

10.3 The market for PRCs

The PDRS creates a market for PRCs by requiring Scheme Participants (mainly electricity retailers) to surrender a certain number of PRCs each year to meet their individual certificate target.

After you have registered PRCs, you can sell them to Scheme Participants or other buyers in the market. They are transferred from the seller to the buyer in the Registry of Certificates. There are no standard contracts, and it is up to you to negotiate the commercial arrangements of this transaction.

The Registry of Certificates is not a trading platform. Trading of certificates occurs outside the Registry of Certificates, which records all current and past ownership of certificates. When a trade occurs, the transfer in ownership of those certificates must be recorded in the Registry of Certificates by transferring the certificates to the new owner.

Our role as the administrator and regulator of the PDRS finishes once PRCs are registered. We do not have a substantive role in the buying or selling of PRCs (apart from registering the transfer of ownership of PRCs in the Registry of Certificates), including setting prices or developing standard contracts.

^y For the current registration fee, see our [website](#). We have also included information about [how the registration fee can be paid](#).

^z A summary of how the transfer process works in TESSA is on our [website](#).

^{aa} More information about how PRCs are surrendered in TESSA is on our [website](#).

^{bb} More information about undertakings and setting aside PRCs is on our [website](#).

Appendices

A Acronyms and key concepts

A.1 Acronyms

| Acronym / Abbreviation | Full Name |
|------------------------|--|
| Act | <i>Electricity Supply Act 1995</i> |
| ACP | Accredited Certificate Provider |
| AEDT | Australian Eastern Daylight Time |
| AEST | Australian Eastern Standard Time |
| BASIX | Building Sustainability Index |
| BCA | Building Code of Australia |
| BESS | Battery energy storage system |
| CCEW | Certificate of Compliance of Electrical Work |
| CEC | Clean Energy Council |
| DRA | Demand Response Aggregator |
| ESC | Energy Savings Certificate |
| ESS | Energy Savings Scheme |
| EUE | End-User Equipment |
| GEMS | Greenhouse and Minimum Energy Standards |
| HADR Method | Household Annual Demand Response Method |
| HEER Method | Home Energy Efficiency Retrofits Method |
| IHEAB Method | Installation of High Efficiency Appliances for Business Method |
| IPART | Independent Pricing and Regulatory Tribunal |
| MEPS | Minimum Energy Performance Standards |
| NEL | National Electricity Law |
| NEM | National Electricity Market |
| NER | National Electricity Rules |
| NERR | National Energy Retail Rules |
| NMI | National Metering Identifier |
| OECC | Office of Energy and Climate Change |
| PDRS | Peak Demand Reduction Scheme |
| PDRS Rule | Peak Demand Reduction Scheme Rule of 2022 |
| PRC | Peak Reduction Certificate |
| Regulation | Electricity Supply (General) Regulation 2014 |
| RESA | Recognised Energy Saving Activity |
| RDUE Method | Reducing Demand Using Efficiency Method |
| RFS | Renewable Fuel Scheme |
| RPA | Recognised Peak Activity |
| SAA | Solar Accreditation Australia |
| Safeguard | Energy Security Safeguard |
| SASC Method | Store and Shift Capacity Method |
| TESSA | The Energy Security Safeguard Application |
| VPP | Virtual Power Plant |

A.2 Key concepts

| Term | Description |
|---|--|
| Accreditation conditions | Conditions imposed by the Scheme Administrator on the accreditation of an ACP under clause 114(1)(b) of Part 2 of Schedule 4A of the Act and specified in your Accreditation Notice. |
| Accreditation Notice | A written notice issued by the Scheme Administrator under clause 62U of the Regulation specifying any accreditation conditions. |
| Accredited Certificate Provider (ACP) | Voluntary participants in the Peak Demand Reduction Scheme (PDRS) and are parties that are accredited to create Peak Reduction Certificates (PRCs) from Recognised Peak Activities (RPAs) that create peak demand reduction capacity. |
| Activity Definitions | The types of activities that can comprise an RPA and are set out in Schedules B, C, and D of the PDRS Rule. |
| Audit | An assessment of whether the ACP has complied, in all material respects, with the requirements of the ESS and/or PDRS. Audits can occur either before certificate registration (pre-registration) or after certificate registration (post-registration). |
| Battery Energy Storage System | A term defined by the Rule as one or more batteries installed on the same day behind a single NMI, and which collectively constitute a system. |
| Capacity Holder | The person with the right to the capacity to reduce peak demand (e.g. the property owner) and defined in the PDRS Rule for each Activity Definition. The Capacity Holder is usually the end customer for the activity. |
| Compliance period | The period commencing on 1 November and ending on 31 March the following year. |
| Demand Response Aggregator | The party who combines the demand reduction capacity from smaller end-user equipment together to create large dispatchable demand response capacity. This capacity is then provided to the electricity grid in response to price or demand fluctuations. |
| End-User Equipment | The equipment (new or existing) that causes, controls or influences electricity consumption. |
| Energy Saver | The person who has the right to create ESCs for energy savings arising from an implementation of a RESA at a site, as defined in the relevant calculation method of the Energy Savings Scheme Rule of 2009. The ESS equivalent of 'Capacity Holder.' |
| Energy Savings Certificate (ESC) | Certificates created and traded under the ESS. One ESC represents one notional megawatt hour (MWh) of energy. |
| Energy Security Safeguard (the Safeguard) | The Safeguard is part of the NSW Government's Electricity Strategy and aims to improve the affordability, reliability and sustainability of energy through the creation of financial incentives encouraging "energy activities" and in the case of the PDRS, "peak demand reduction capacity". |
| Implementation Data | Data that must be uploaded for each Implementation when registering PRCs. See section 10.2.1 above and our TESSA for ACPs webpage for more information. |
| Implementation Date | The date from which peak demand reduction can be calculated. Defined by the PDRS Rule for each activity. |
| Improperly created PRCs | PRCs that are not created in a way that meets the requirements of the Act, Regulation, PDRS Rule and/or any accreditation conditions imposed on the ACP. In general, improperly created PRCs must be surrendered by the ACP. |
| Peak demand reduction capacity | The capacity to reduce demand for electricity during the period between 2.30pm and 8.30pm AEST from 1 November to 31 March. |
| Peak Reduction Certificate (PRC) | One PRC represents 0.1 kilowatt of peak demand reduction capacity averaged over one hour on 6 hours of one day of the compliance period (i.e. between 2.30pm and 8.30pm AEST). |
| Recognised Energy Savings Activity (RESA) | An energy savings activity that is eligible under the Energy Savings Scheme. |

| Term | Description |
|--------------------------------|--|
| Recognised Peak Activity (RPA) | An activity that provides capacity to reduce electricity use during the time of peak demand in accordance with the requirements of the PDRS Rule. |
| Registry of Certificates | The registry of Energy Savings Certificates and PRCs established and managed by IPART and accessed through The Energy Security Safeguard Application or "TESSA". |
| Safeguard | See Energy Security Safeguard above. |
| Scheme Participants | Mandatory participants in the ESS and PDRS, primarily electricity retailers, who are required to meet individual targets through the surrender of ESCs/PRCs or payment of a penalty. |
| TESSA | Our online system and portal for the schemes. It houses the Registry of Certificates and the Accepted Products List and is where ACPs and Scheme Participants can conduct most of their business relating to the scheme. Stands for The Energy Security Safeguard Application. |

B How to meet the evidence requirements

B.1 Evidence requirements common to all PDRS activities

The following tables contain examples of how you may evidence that you have met the corresponding requirements. They are not the only way to demonstrate your compliance with the requirements.

Table B.1 Evidence requirements for all PDRS activities

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|--|--|----------------------|
| <p>You are the original Capacity Holder</p> <p>For BESS2, this means you are the account holder of the electricity account for the National Metering Identifier, and are the person who has signed the demand response contract with the DRA</p> <p>For all other activities, this means you are the Purchaser.</p> | <ul style="list-style-type: none"> For BESS2, the evidence must clearly show who is the account holder of the electricity account for the National Metering Identifier. The account holder must be the same person who has signed the demand response contract with the Demand Response Aggregator. For example, an electricity bill that shows the NMI and account holder name. For all Activity Definitions except BESS2, the evidence must show you are the "Purchaser". For example, a purchasing receipt or lease agreement showing you are the owner, occupier, or operator. | Cls 4.1(a), 7.1.3, 7.1.6, 8.1.5, and 9.1.3 | Section 7.1 |
| <p>If you're not the original Capacity Holder, you must be correctly nominated as the Capacity Holder</p> | <ul style="list-style-type: none"> For all Activity Definitions except BESS2, signed Nomination Form containing the same information as the Nomination Template we have published on our website. For BESS2, evidence of nomination by the account holder that complies with the Nomination Specification for BESS2 published on our website. If applicable, a copy of the revocation of previous nominations. | Cl 4.1(b) | Section 7.2 |
| Implementation Date | <p>For RDUE and BESS1 activities:</p> <ul style="list-style-type: none"> Evidence must prove the date the new EUE is installed at the site. For example, a Certificate of Compliance of Electrical Work (CCEW), tax invoice, run sheet, signed owner and contractor declaration or time-stamped photograph. <p>For BESS2:</p> <ul style="list-style-type: none"> Evidence must show the date that the contract is signed. For example, a signed and dated contract, or proof of the date the contract is digitally signed or accepted by the customer. | Cls 7.1.2, 7.1.5, 8.1.4 and 9.1.3 | Section 7.3.2 |

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|---|--|---|-------------------------------|
| An RPA must occur at a Site connected to the Electricity Network (transmission and distribution systems) within NSW | <ul style="list-style-type: none"> A recent electricity bill showing the address of the site, NMI, and electricity provider information, or A CCEW showing the date the work was conducted, the NMI, and the address connected to the electricity network where the work took place. | Cl 5.1(b), Cl 10 (Definitions of Site, Address and Electricity Network) | Section 8.2.1 |
| The site is a residential or small business site. | <p>Electricity bills showing:</p> <ul style="list-style-type: none"> the name of the residence or business where the work took place, the Australian Business Number (ABN) or Australian Company Number (ACN) of the business, and that the annual electricity consumption/usage is under 100MWh per year (or an equivalent figure, such as average daily usage, that allows for annual consumption to be calculated for the business site where the work took place. | Cls 7.1.1(a), 7.1.4(a), 8.1.1(a), and 9.1.1(a) | Section 8.2.2 & section 8.2.3 |
| HVAC1, SYS2 and BESS1 to be conducted at Residential Buildings and Small Business Sites only; | <p>Or for a customer of an exempt seller:</p> <ul style="list-style-type: none"> information on electricity consumption/usage that shows consumption under the upper consumption threshold per year (currently 100MWh) for the business site where the work took place, and if the seller holds a registered exemption, an extract from the public register of retail exemptions showing the exempt seller's name. | | |
| WH1 cannot be conducted at BCA Class 1 or 4 buildings; and | <p>Or for evidence of a business, if the electricity bill does not provide evidence of the site being occupied by a business, an additional piece of evidence must be provided for the site at which the work took place, such as:</p> <ul style="list-style-type: none"> the ABN or ACN certificate confirming the business name an ASIC extract confirming the business name, or receipts produced by the business showing the business name and ABN or ACN. | | |
| BESS2 can only be conducted at Residential Buildings. | | | |
| EUE is not refurbished, re-used or resold | <ul style="list-style-type: none"> Tax invoice or tax receipt from the disposal or recycling company showing that the old EUE has been removed from site and disposed of, or An installer declaration. | Cl 5.3(a) | Section 8.2.4 |
| EUE is correctly disposed of | <ul style="list-style-type: none"> Tax invoice or tax receipt from the disposal or recycling company showing the old EUE and the method of disposal, or An installer declaration. | Cl 5.3(b) | Section 8.2.4 |

B.2 Evidence requirements for each Activity Definition

Table B.2 Evidence requirements – activity HVAC1 – residential air conditioning

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|--|--------------------------------------|----------------------|
| Installation of a new high efficiency air conditioner or a replacement of an existing air conditioner with a high efficiency air conditioner | <ul style="list-style-type: none"> A site assessor declaration | HVAC1 Eligibility Requirement | Section 8.3 |
| New EUE must be a registered GEMS product and comply with the Greenhouse and Energy Minimum Standards Determination and relevant minimum standards | <p>The evidence must show the new/replacement EUE, on the Implementation Date:</p> <ul style="list-style-type: none"> is registered in the GEMS Registry as complying with the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019; and has the requisite Cooling Capacity variables recorded in the GEMS Registry, as set out in the respective activity definition. | HVAC1 Equipment Requirements 1 and 2 | Section 8.3 |
| Existing EUE must be removed | <ul style="list-style-type: none"> A post-implementation declaration, or A geo-tagged and time stamped photograph showing the existing EUE before and after removal | HVAC1 Implementation Requirement 1 | Section 8.3 |
| New EUE must be installed | <ul style="list-style-type: none"> A post-implementation declaration, or A geo-tagged and time stamped photograph showing the new EUE in place at the site. | HVAC1 Implementation Requirement 2 | Section 8.3 |
| Activities must be carried out by suitably licensed people | <ul style="list-style-type: none"> A post-implementation declaration, or Installation receipt showing registered licence information, or A certificate of compliance (e.g. a CCEW). | HVAC1 Implementation Requirement 3 | Section 8.3 |

Table B.3 Evidence requirements – activity HVAC2 – commercial air conditioning

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|--|--------------------------------------|----------------------|
| The New End-User Equipment 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. | <ul style="list-style-type: none"> • Proof that the site is not a Residential Building Site, or • Proof that the installation is the replacement of a centralised system in a Class 2 Building. For example, a site assessment report prepared for the activity under the ESS. | HVAC2 Eligibility Requirement 1 | Section 8.3 |
| New EUE must be a registered GEMS product and comply with the Greenhouse and Energy Minimum Standards Determination and relevant minimum standards | <p>The evidence must show the new/replacement EUE, on the Implementation Date:</p> <ul style="list-style-type: none"> • is registered in the GEMS Registry as complying with the Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019; and • has the requisite Cooling Capacity variables recorded in the GEMS Registry, as set out in the respective activity definition. | HVAC2 Equipment Requirements 1 and 2 | Section 8.3 |
| Existing EUE must be removed | <ul style="list-style-type: none"> • An installer declaration, or • A geo-tagged and time stamped photograph showing the existing EUE before and after removal. | HVAC2 Implementation Requirement 1 | Section 8.3 |
| New EUE must be installed | <ul style="list-style-type: none"> • An installer declaration, or • A geo-tagged and time stamped photograph showing the new EUE in place at the site. | HVAC2 Implementation Requirement 2 | Section 8.3 |
| Activities must be carried out by suitably licensed people | <ul style="list-style-type: none"> • An installer declaration, or • Installation receipt showing registered licence information, or • A certificate of compliance (e.g. a CCEW). | HVAC2 Implementation Requirement 3 | Section 8.3 |

Table B.4 Evidence requirements – activity WH1 – commercial heat pump water heaters

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|---|---|----------------------------------|----------------------|
| The existing EUE is an electric resistance hot water boiler or water heater | <ul style="list-style-type: none"> A geo-tagged photo showing that the existing EUE, before it was removed, was an electric resistance hot water boiler or water heater, or A site assessment report prepared for the activity under the ESS. | WH1 Eligibility Requirement 1 | Section 8.3 |
| The End-User Equipment must not be installed in a BCA Class 1 or 4 building. | <ul style="list-style-type: none"> A site assessment report prepared for the activity under the ESS. | WH1 Eligibility Requirement 3 | Section 8.3 |
| New EUE must meet the Equipment Requirements and must be accepted by the Scheme Administrator | Water heater products installed for WH1 must be accepted by us. Evidence of acceptance includes inclusion on the public list of accepted products or correspondence from us that the product has been accepted. ^a | WH1 Equipment Requirements | Section 8.3 |
| Existing EUE must be removed | <ul style="list-style-type: none"> An installer declaration, or A geo-tagged and time stamped photograph showing the existing EUE before and after removal. | WH1 Implementation Requirement 1 | Section 8.3 |
| New EUE must be installed | <ul style="list-style-type: none"> An installer declaration, or A geo-tagged and time stamped photograph showing the new EUE in place at the site. | WH1 Implementation Requirement 2 | Section 8.3 |
| Activities must be carried out by suitably licensed people | <ul style="list-style-type: none"> An installer declaration, or Installation receipt showing registered licence information, or A certificate of compliance (e.g. a CCEW). | WH1 Implementation Requirement 3 | Section 8.3 |

a: Accepted products are listed on the ESS website on the Accepted Products List. Products must be listed as accepted for WH1 in the 'Activity Definition' column, and your Implementation Date must be after the Effective From date, and before the Effective To date (if any).

Table B.5 Evidence requirements – activity RF2 – replacement of refrigerated cabinets

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|---|----------------------------------|----------------------|
| New EUE must be a registered GEMS product and comply with the Greenhouse and Energy Minimum Standards Determination and relevant minimum standards | <p>The evidence must show the new EUE, on the Implementation Date:</p> <ul style="list-style-type: none"> is defined as a refrigerated cabinet and registered product under the <i>Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020</i>, and has an Energy Efficiency Index (EEl) below 81 as recorded in the GEMS Registry, except Integral Ice Cream Freezer Cabinets (class 5) which must have an EEl below 51, and is a registered product based on the <i>Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020</i> or the New Zealand Energy Efficiency (Energy Using Products) Amendment Regulations 2020, as updated from time to time. <p>For example, extracts of the GEMS Registry.</p> | RF2 Equipment Requirements 1-3 | Section 8.3 |
| New EUE must not have 4 or more display sides. | <ul style="list-style-type: none"> Geo-tagged photo(s) showing the number of sides of the new EUE and the material that each side is made from. | RF2 Equipment Requirement 4 | Section 8.3 |
| Existing EUE is of the same Refrigerated Cabinet Product Class or of a corresponding AS 1731 Product Type (as set out in Table F1.2.1 of the PDRS Rule) as the new equipment | <p>The evidence must show the existing EUE the existing equipment is, on the Implementation Date, of the same Refrigerated Cabinet Product Class or of a corresponding AS 1731 Product Type (as set out in Table F1.2.1 of the PDRS Rule) as the new EUE.</p> <p>For example:</p> <ul style="list-style-type: none"> Geo-tagged photos of the new and existing EUE showing their model and make <p>and</p> <ul style="list-style-type: none"> extracts of the GEMS Registry showing the product class of both EUE. | RF2 Equipment Requirement 5 | Section 8.3 |
| Existing EUE must be removed | <ul style="list-style-type: none"> An installer declaration, or A geo-tagged and time stamped photograph showing the existing EUE before and after removal. | RF2 Implementation Requirement 1 | Section 8.3 |
| New EUE must be installed | <ul style="list-style-type: none"> An installer declaration, or A geo-tagged and time stamped photograph showing the new EUE in its intended place of use and operating at the site. | RF2 Implementation Requirement 2 | Section 8.3 |
| Activities must be carried out by suitably licensed people | <ul style="list-style-type: none"> An installer declaration, or Installation receipt showing registered licence information, or A certificate of compliance (e.g. a CCEW). | RF2 Implementation Requirement 3 | Section 8.3 |

Table B.6 Evidence requirements – activity SYS2 – residential pool pumps

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|---|-------------------------------------|----------------------|
| Installation of a new high efficiency pool pump or a replacement of an existing pool pump with a high efficiency pool pump | <ul style="list-style-type: none"> A site assessor declaration | SYS2 Eligibility Requirement | |
| New EUE must be a registered GEMS product and comply with the Greenhouse and Energy Minimum Standards Determination | <p>The evidence must show the new EUE, on the Implementation Date:</p> <ul style="list-style-type: none"> is registered in the GEMS Registry as complying with the Greenhouse and Energy Minimum Standards (Swimming Pool Pump-units) Determination 2021, and has a star rating, as recorded in the GEMS Registry, equal to or greater than 4 | SYS2 Equipment Requirements 1 and 2 | Section 8.3 |
| New EUE must have a warranty period of at least 3 years | <ul style="list-style-type: none"> the warranty document for the new EUE. | SYS2 Equipment Requirement 3 | Section 8.3 |
| Existing EUE must be removed | <ul style="list-style-type: none"> A post-implementation declaration, or A geo-tagged and time stamped photograph showing the existing EUE before and after removal. | SYS2 Implementation Requirement 1 | Section 8.3 |
| New EUE must be installed | <ul style="list-style-type: none"> A post-implementation declaration, or A geo-tagged and time stamped photograph showing the new EUE in place at the site. | SYS2 Implementation Requirement 2 | Section 8.3 |
| Activities must be carried out by suitably qualified licence holder | <ul style="list-style-type: none"> A post-implementation declaration, or Installation receipt showing registered licence information, or A certificate of compliance (e.g. a CCEW). | SYS2 Implementation Requirement 3 | Section 8.3 |
| Existing pool pump must be removed according to relevant safety standards and legislation | <ul style="list-style-type: none"> A post-implementation declaration, or Installation receipt showing registered licence information, or A certificate of compliance (e.g. a CCEW). | SYS2 Implementation Requirement 4 | Section 8.3 |

Table B.7 Evidence requirements – activity BESS1 – installation of battery energy storage system

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|---|--|--------------------------------------|----------------------|
| Minimum co-payment for each battery unit being installed | <p>Tax invoice AND sales ledger</p> <p>The tax invoice must clearly show all the following:</p> <ul style="list-style-type: none"> • the amount paid for the implementation, • the name of the purchaser, • the ABN of the purchaser (if applicable), • the goods or services purchased, • the date of the purchase. <p>The sales ledger must clearly show all the following:</p> <ul style="list-style-type: none"> • the amount paid for the implementation, • when the payment was made, • who made the payment. | Cl 8.11(f) | Section 8.2.5 |
| There must not be an existing battery energy storage system installed at the same National Metering Identifier (NMI) | <p>Evidence that there is no existing battery energy storage system. For example:</p> <ul style="list-style-type: none"> • a declaration by the householder and installer, or • a geo-tagged photo of the switchboard prior to installation that demonstrates no other battery is connected to the switchboard. | BESS1 Eligibility Requirement 1 | Section 8.3 |
| A behind the meter solar photovoltaic system must be installed at the same NMI that the new EUE is being installed | <p>Evidence of a solar photovoltaic system at the same NMI. For example:</p> <ul style="list-style-type: none"> • a geo-tagged photo of the solar photovoltaic system installed at the site, or • evidence of the DER Register showing that a solar PV system has been installed at the NMI, or • a geo-tagged photo of the switchboard showing that a PV system is installed. | BESS1 Eligibility Requirement 2 | Section 8.3 |
| <p>EUE must be listed on the approved product list specified by the Scheme Administrator on the Implementation Date, and be listed as having a Usable Battery Capacity greater than 2kWh and less than 28kWh</p> <p><i>Note: where a Battery Energy Storage System is comprised of multiple batteries, each individual battery unit must be listed on the CEC's list of approved batteries, and the combined Usable Battery Capacity of the battery system must be greater than 2kWh and less than 28kWh.</i></p> | <p>The evidence must show the battery make(s) and model(s) listed on the Clean Energy Council's list of approved batteries, as of the Implementation Date AND a geo-tagged photo of the installed end-user equipment, clearly showing:</p> <ul style="list-style-type: none"> • the make(s) and model(s) of the equipment. | BESS1 Equipment Requirements 1 and 2 | Section 8.3 |

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|---|--|--------------------------------------|----------------------|
| EUE must be internet connectable and controllable by a Demand Response Aggregator | <p>Evidence showing that each battery is internet connectable and controllable. For batteries without a built-in inverter (marked 'pre-assembled battery system' on the CEC's product list), this can be evidence that the inverter that controls the battery is internet connectable and controllable. For example:</p> <ul style="list-style-type: none"> • data sheet or fact sheet for the make and model of installed battery or inverter | BESS1 Equipment Requirement 3 | Section 8.3 |
| EUE's warranty must meet the warranty requirements listed in the PDRS Rule | <p>Evidence of the warranty containing the required conditions for the make and model of the installed battery. For example:</p> <ul style="list-style-type: none"> • a copy of the warranty for the installed battery's make and model, and • evidence demonstrating the Implementation Date (see Table B.1 above) | BESS1 Equipment Requirements 4 and 5 | Section 8.3 |
| New EUE must be installed in accordance with AS/NZS 5139 | <p><i>Note: For this requirement, we are requiring these specific types of evidence rather than suggesting these as examples,</i></p> <p>Declaration from the installer that the installation complies with AS/NZS 5139 (the Standard)</p> <p>and</p> <p>Geo-tagged photos demonstrating all of the following:</p> <ol style="list-style-type: none"> 1. Long shot showing the context of the installation and showing the surroundings of where the battery is installed, 2. That the battery has not been installed in a restricted location as set out in the Standard, and in particular within the prescribed distance of any exit, window or building ventilation or hot water unit or air conditioning unit or other appliance not associated with the battery. 3. The distance of the battery from any habitable room or point of egress (including if it is mounted on a wall, the room on the other side of that wall), and the building materials of any barriers within 1.5m of the battery. 4. If any other material risks were identified in the risk assessment, photographic evidence of the risk mitigation measures. Risk mitigation measures may include any measures to protect the battery such as additional enclosure or housing, or specific labelling required because of the design of the installation. <p>and</p> <p>An annotated map of the site (hand-drawn or electronic), clearly showing the battery's location and clearance relative to other nearby rooms and equipment (e.g. windows and exits).</p> <p>and</p> <p>A copy of the battery risk assessment by the installer, identifying the hazards associated with the battery installation as required under the Standard</p> <p>and</p> <p>Evidence of signage for the battery on and around the switchboard, demonstrating that the labelling and signage requirements under Standard (AS/NZS 5139) have been met</p> <ul style="list-style-type: none"> • e.g. ES labels and if necessary, layout/location of battery | BESS1 Implementation Requirement 1 | Section 8.3 |

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|---|---|------------------------|
| <p>New EUE must be installed by an installer on the approved installer list specified by the Scheme Administrator</p> <p><i>Note: The installer's name and their accreditation number (as it appears on the approved installer list specified by the Scheme Administrator) must be provided for each implementation as part of the implementation data uploaded when registering certificates.</i></p> | <p>and Evidence that the switchboard has been labelled according to AS/NZS 3000 (the Wiring Rules).</p> <p>Evidence of the installer's Grid-Connected Battery Storage 'Design and Install' or 'Install only' accreditation with Solar Accreditation Australia. For example, their accreditation number,</p> <p>and Evidence that the installer conducted the work. For example:</p> <ul style="list-style-type: none"> • CCEW, or • installer declaration. <p>and Geo-tagged photos proving the installer was at the site for the three stages of the installation (job setup, mid-installation check-up, and testing and commissioning). The easiest way is through selfies that:</p> <ul style="list-style-type: none"> • clearly show the installer's face • show the 3 stages of installation, for example: <ul style="list-style-type: none"> – a letterbox or the front of the property for setup – racking visible on the roof for mid-installation – the installed system for testing and commissioning. • include date and time metadata | <p>BESS1 Implementation Requirement 2</p> | <p>Section 8.3</p> |
| <p>Activities must be carried out by suitably licensed people</p> | <p>Evidence of the installer's unrestricted electrical licence, showing the name and electrical licence number of the installer,</p> <p>and Evidence of any other licences necessary for the activity at the site.</p> | <p>BESS1 Implementation Requirement 3</p> | <p>Section 8.3</p> |

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|---|--|----------------------|
| The installation of the new EUE must be registered on the DER Register | <p>Evidence of the entry of the installation to the DER Register. The evidence must show all the following:</p> <ul style="list-style-type: none"> • The NMI of the installation • The make and model of the battery • Confirmation that the information has been added to the Register. <p>For example:</p> <ul style="list-style-type: none"> • Certificate or confirmation receipt by email from AEMO that the battery installation is added to the DER Register. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><i>[Note: IPART is aware of issues currently delaying the registration of some batteries on the DER Register. DCCEEW is working with the network service providers and AEMO to improve registration pathways.</i></p> <p><i>In the interim, where an ACP cannot evidence that the battery is registered on the DER Register, it is open to auditors to provide qualified assurance provided the ACP has evidence that a submission to register the battery on the DER Register is in progress. For batteries installed in the:</i></p> <ul style="list-style-type: none"> • Endeavour Energy network - ACPs must evidence that Endeavour has received a submission to register the battery on the DER Register, <u>and</u> the ACP must be in possession of all the data needed to have successfully submitted the required information. • Ausgrid or Essential Energy networks - ACPs must evidence that a submission to register the battery on the DER Register has been received by AEMO, <u>and</u> the ACP must be in possession of all the data needed to have successfully submitted the required information. Where a submission to register the battery on the DER Register has failed, the ACP must have evidence that AEMO has responded to a request for resolution, and the resolution is being actioned. <p><i>Where auditors provide qualified assurance for this item, they may make a recommendation, or the Scheme Administrator may request that the ACP evidence that the battery was subsequently registered on the DER Register. This would be tested in a following audit. The Scheme Administrator may seek forfeit of certificates where ACPs do not provide satisfactory evidence.</i></p> <p><i>This arrangement is not intended to endure. ACPs and installers are expected to work with the available procedures to ensure batteries are registered on the DER Registry.]</i></p> </div> | BESS1 Implementation Requirement 4 | Section 8.3 |
| Where the new EUE is installed indoors, a working smoke alarm that meets AS 3786 must be installed in the immediate vicinity | <p>Geo-tagged photo(s) taken with a wide angle, demonstrating that the battery is not installed indoors,</p> <p>or</p> <p>Evidence of a smoke alarm installed nearby, and of its compliance with AS 3786. For example:</p> <ul style="list-style-type: none"> • Geo-tagged photo(s) clearly showing the location of the smoke alarm in relation to the installed battery <p>and</p> | BESS1 Implementation Requirement 5 | Section 8.3 |

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|-----------------------------------|--|---------------------|-----------------------------|
| | <ul style="list-style-type: none">Declaration by the installer that the smoke alarm complies with AS 3786 and was tested by the installer to be in working order on the Implementation Date. | | |
| Relevant fact sheets are provided | Copy of email to the customer with the fact sheet attached. | n/a | Section 8.5.3 and Table 3.2 |

Table B.8 Evidence requirements – activity BESS2 – signing up a residential battery to a demand response contract

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|---|--|--|----------------------|
| The demand response contract must meet the relevant requirements | The contract: <ul style="list-style-type: none"> is for the provision of demand response capacity with a Demand Response Aggregator for at least three years, and is signed by the account holder for the electricity account of the NMI where the Battery Energy Storage System is installed. | Clause 9.1.1(f) | Section 6.1 |
| The counterparty to the demand response contract aggregates demand response capacity, and is either: <ul style="list-style-type: none"> a Market Participant, or a Network Service Provider | A copy of the signed contract between the account holder of the NMI and the counterparty that shows the counterparty's name, <p>and</p> Evidence that shows that the same counterparty is registered as a Market Participant or Network Service Provider under the National Electricity Rules. | Cl 9.1.1(f); Clause 10.1, definition of "Demand Response Aggregator", sub-clause (a) | Section 8.2.6 |
| The counterparty has engaged in a contract to aggregate demand response capacity (and related activities) on behalf of either: <ul style="list-style-type: none"> a Market Participant, or a Network Service Provider | A copy of the signed contract between the account holder of the NMI and the counterparty that shows the counterparty's name, <p>and</p> A copy of a contract between the counterparty and a Market Participant or Network Service Provider for the aggregation of demand response capacity and any related activities on their behalf, <p>and</p> Evidence that shows that the person on whose behalf the demand response capacity is being aggregated is registered as a Market Participant or Network Service Provider under the National Electricity Rules. | Cl 9.1.1(f); Clause 10.1, definition of "Demand Response Aggregator", sub-clause (b) | Section 8.2.6 |
| There is an existing Battery Energy Storage System installed at the same National Metering Identifier (NMI) | A geo-tagged photo of the existing battery. | BESS1 Eligibility Requirement 1 | Section 8.3 |
| A behind the meter solar photovoltaic system must be installed at the same NMI that the new EUE is being installed | Evidence of a solar photovoltaic system at the same NMI. For example: <ul style="list-style-type: none"> a geo-tagged photo of the solar photovoltaic system installed at the site, evidence of the DER Register showing that a solar PV system has been installed at the NMI, or a geo-tagged photo of the switchboard showing that a PV system is installed. | BESS2 Eligibility Requirement 2 | Section 8.3 |
| There is no Life Support Equipment used at the Site | A declaration by the homeowner that there is no Life Support at the site. | BESS2 Eligibility Requirement 3 | Section 8.3 |

| Requirement | Examples of evidence that may prove requirement is met | PDRS Rule Reference | Method Guide section |
|--|--|---|------------------------------------|
| <p>EUE must be listed on the approved product list specified by the Scheme Administrator, and be listed as having a Usable Battery Capacity greater than 2kWh and less than 28kWh</p> <p><i>Note: where a Battery Energy Storage System is comprised of multiple batteries, each individual battery unit must be listed on the CEC's list of approved batteries, and the combined Usable Battery Capacity of the battery system must be greater than 2kWh and less than 28kWh.</i></p> | <p>The evidence must show the battery make and model is listed on the Clean Energy Council's list of approved batteries, as of the Implementation Date</p> <p>AND</p> <p>a geo-tagged photo of the installed end-user equipment, clearly showing:</p> <ul style="list-style-type: none"> the make and model of the equipment. | <p>BESS2 Equipment Requirements 1 and 2</p> | <p>Section 8.3</p> |
| <p>EUE's warranty must meet the warranty requirements listed in the PDRS Rule</p> | <p>Evidence of the installation date of the warranty. For example, evidence demonstrating the installation date:</p> <ul style="list-style-type: none"> Tax invoice or contract for installation, CCEW, or Payment receipt. <p>and</p> <p>Evidence of the warranty defining the normal use conditions and the length of the warranty for the make and model of the installed battery. For example:</p> <ul style="list-style-type: none"> A copy of the warranty for the installed battery's make and model, <p>and</p> <p>Evidence demonstrating the Implementation Date (see Table B.1 above).</p> | <p>BESS2 Equipment Requirements 3 and 4</p> | <p>Section 8.3</p> |
| <p>Participation through the demand response contract must not void or diminish the EUE's warranty below the conditions listed in the BESS2 Equipment Requirements.</p> | <p>Evidence of what the warranty for the battery guarantees</p> <p>and</p> <p>Evidence that the DRA's control of the battery will meet the requirement.</p> | <p>BESS2 Equipment Requirement 5</p> | <p>Section 8.3</p> |
| <p>Internet connection and DRA control of the EUE must be demonstrated to be operational to the satisfaction of the Scheme Administrator</p> | <p>Evidence that Demand Response Aggregator has the ability to control the battery:</p> <ul style="list-style-type: none"> Proof of connection to battery software by the DRA (e.g. ping test), or Proof of activation/dispatch in response to a signal from the DRA (e.g. example dispatch with monitoring from meter or from battery's meter). | <p>BESS2 Implementation Requirement 1</p> | <p>Section 8.3</p> |
| <p>Relevant fact sheets are provided</p> | <ul style="list-style-type: none"> Declaration by the customer, or Copy of email to the customer with the fact sheet attached. | <p>n/a</p> | <p>Section 8.5.3 and Table 3.2</p> |

C Certificate calculations: Worked examples

All worked examples are calculated using inputs rounded down to 3 decimal places. Peak Demand Savings/Shifting/Response Capacity is rounded down to 4 decimal places for simplicity. No further rounding takes place until the final step, where the number of PRCs (representing 0.1 kW increments of Peak Demand Reduction Capacity) must be rounded down to a whole number.

C.1 HVAC1 – Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner

| Step | Description |
|--|--|
| Scenario | The activity is a new installation and not a replacement Location of implementation: Coffs Harbour (Postcode: 2450) (BCA Climate Zone 2 / Essential Energy distribution) The product meets the Equipment Requirements The product has a Residential TCSPF_mixed value recorded in the GEMS Registry |
| Product | Installation of a Panasonic non ducted split system air conditioner (CU-Z71VKR / CS-Z71VKR) Configuration: Air-air, non-ducted, split system (Source: GEMS Registry) Residential TCSPF_mixed value: 4.6 (Source: GEMS Registry, Column DX) Rated AEER: 3.5824 (Source: GEMS Registry, Column FJ) |
| Step 1: Baseline input power | Equation HVAC1.1: Baseline Input Power = Rated Cooling Capacity ÷ Baseline AEER Rated Cooling Capacity ²⁹ = 7.1 kW (Source: GEMS Registry, Column Q) Baseline AEER = 3.22 (Source: Table HVAC1.1 of the PDRS Rule) Baseline Input Power = 7.10 ÷ 3.220 = 2.205 kW |
| Step 2: Baseline Peak Adjustment Factor | Equation HVAC1.2: Baseline Peak Adjustment Factor = Temperature Factor x Usage Factor Temperature Factor = 0.48 (Source: Table A5 of the PDRS Rule) Usage Factor = 0.72 (Source: Activity Definition HVAC1) Baseline Peak Adjustment Factor = 0.48 x 0.72 = 0.3456 |
| Step 3: Input Power | Rated cooling input power at 35°C: 1.97 kW (Source: GEMS Registry, Column O) |
| Step 4: Peak Adjustment Factor | Peak adjustment factor = Baseline Peak Adjustment Factor (Source: Calculation Step 2) |
| Step 5: Firmness Factor | Firmness Factor = 1 (Source: Table A6 of the PDRS Rule) |
| Step 6: Peak Demand Savings Capacity | Peak Demand Savings Capacity = ((Baseline Input Power x Baseline Peak Adjustment Factor) – (Input Power x Peak Adjustment Factor)) x Firmness Factor Baseline Input Power = 2.205 kW (Calculation Step 1) Baseline Peak Adjustment Factor = 0.3456 (Calculation Step 2) Input Power = 1.97 kW (Calculation Step 3) Peak Adjustment Factor = 0.3456 (Calculation Step 4) |

²⁹ The GEMS Registry uses the term "C-Total Cool Rated" for the cooling capacity.

| Step | Description |
|---|---|
| | Firmness Factor = 1 (Calculation Step 5) Peak Demand Savings Capacity = $((2.205 \times 0.3456) - (1.97 \times 0.3456)) \times 1 = 0.08122 \text{ kW}$ |
| Step 7: Peak Demand Reduction Capacity | Equation 2a: Peak Demand Reduction Capacity = Peak Demand Savings Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Savings Capacity = 0.08122 kW (Calculation Step 6) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2a) Lifetime = 10 years (Activity Definition HVAC1) Peak Demand Reduction Capacity = $0.08122 \times 6 \times 10 = 4.8732$ |
| Step 8: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 4.8732 (Calculation Step 7) Network Loss Factor = 1.05 (Source: Table A3 of the PDRS Rule) Number of Certificates = $4.8732 \times 1.05 \times 10 = 51.1686$ Number of Certificates = 51 |

C.2 HVAC2 – Install a new high efficiency air conditioner or replace an existing air conditioner with a high efficiency air conditioner

| Step | Description |
|--|--|
| Scenario | The activity is a replacement and not a new installation Location of implementation: Randwick, Sydney (Postcode: 2031) (BCA Climate Zone 5 / Ausgrid distribution) The product meets the Equipment Requirements The product has a Cooling Capacity recorded in the GEMS Registry The product has a Commercial TCSPF_mixed value recorded in the GEMS Registry |
| Product | Installation of a DAIKIN ducted split system air conditioner (RZAS140C2V1 / FDYA140AV1) Configuration: Air-air, ducted, single split system (Source: GEMS Registry, Columns I-M) Commercial TCSPF_mixed value: 5.801 (Source: GEMS Registry, Column EA) Rated AEER: 3.5179 (Source: GEMS Registry, Column FJ) |
| Step 1: Baseline input power | Equation HVAC2.1: Baseline Input Power = Rated Cooling Capacity ÷ Baseline AEER Rated Cooling Capacity = 14 kW (Source: GEMS Registry, Rated cooling capacity at 35°C as recorded in Column Q of GEMS Registry) Baseline AEER = 2.8 (Source: Table HVAC2.2 of the PDRS Rule) Baseline Input Power = 14 ÷ 2.8 = 5.0 kW |
| Step 2: Baseline Peak Adjustment Factor | Equation HVAC2.2: Baseline Peak Adjustment Factor = Temperature Factor x Usage Factor Temperature Factor = 0.55 (Source: Table A5 of the PDRS Rule) Usage Factor = 0.6 (Source: PDRS Rule) Baseline Peak Adjustment Factor = 0.55 x 0.6 = 0.33 |
| Step 3: Input Power | Rated cooling input power at 35°C: 3.93 kW (Source: GEMS Registry, Column O) |
| Step 4: Peak Adjustment Factor | Peak adjustment factor = Baseline Peak Adjustment Factor (Source: Calculation Step 2) |
| Step 5: Firmness Factor | Firmness Factor = 1 (Source: Table A6 of the PDRS Rule) |
| Step 6: Peak Demand Savings Capacity | Peak Demand Savings Capacity = ((Baseline Input Power x Baseline Peak Adjustment Factor) – (Input Power x Peak Adjustment Factor)) x Firmness Factor Baseline Input Power = 5.0 kW (Calculation Step 1) Baseline Peak Adjustment Factor = 0.33 (Calculation Step 2) Input Power = 3.93 kW (Calculation Step 3) Peak Adjustment Factor = 0.333 (Calculation Step 4) Firmness Factor = 1 (Calculation Step 5) Peak Demand Savings Capacity = ((5.0 x 0.33) – (3.93 x 0.33)) x 1 = 0.3531 kW |
| Step 7: Peak Demand Reduction Capacity | Equation 2a: Peak Demand Reduction Capacity = Peak Demand Savings Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Savings Capacity = 0.3531 kW (Calculation Step 6) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2a) Lifetime = 10 years (Activity Definition HVAC1) Peak Demand Reduction Capacity = 0.3531 x 6 x 10 = 21.1860 |
| Step 8: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 21.1860 (Calculation Step 7) Network Loss Factor = 1.04 (Source: Table A3 of the PDRS Rule) Number of Certificates = 21.1860 x 1.04 x 10 = 220.3344 Number of Certificates = 220 |

C.3 WH1 – Replace one or more existing hot water boilers or water heaters with one or more air source heat pump water heaters

| Step | Description |
|--|---|
| Scenario | The product is on the Product Register The implementation is in Randwick, Sydney (Postcode: 2031) (BCA Climate Zone 5 / Ausgrid distribution) <i>BCA Climate Zone 3 relates to AS/NZS 4234 climate zone HP3-AU, listed as Zone 3 in the Accepted Products List</i> |
| Product | Brand: Automatic Heating Model: Revere 1CHP-80-1T750-S Listed on the Scheme Administrator's Accepted Products List Replacement system is not larger than the existing system (i.e. Capacity Factor is 1) |
| Step 1: Baseline input power | Equation WH1.1: Baseline Input Power = $0.01 \times \text{ComPkLoad}$ ComPkLoad = 2,521 MJ/day (Source: Accepted Product List, under "Peak Load (MJ/Day) for the corresponding AS/NZS climate zone") Baseline Input Power = $0.01 \times 2521 = 25.21 \text{ kW}$ |
| Step 2: Baseline Peak Adjustment Factor | Baseline Peak Adjustment Factor: 1 (Source: Table A4 of the PDRS Rule) |
| Step 3: Input Power | Equation WH1.2: Input Power = $(100 - \text{Annual Energy Savings \%}) \times \text{Baseline Input Power} \div 100$ Annual Energy Savings = 63.5% (Source: Accepted Product List, under "Annual Energy Savings %" for the corresponding AS/NZS climate zone) Baseline Input power = 25.21 kW (Source: Calculation Step 1) Input Power = $(100 - 63.5) \times (25.21 \div 100) = 9.20165 \text{ kW}$ |
| Step 4: Peak Adjustment Factor | Peak adjustment factor: 0.77 (Source: Table A4 of the PDRS Rule) |
| Step 5: Capacity Factor | Capacity Factor = 1 (calculated by reference to the total rated capacity of the existing hot water boiler/water heater and the new heat pump water heater being installed) |
| Step 6: Firmness Factor | Firmness Factor: = 1 (Source: Table A6 of the PDRS Rule) |
| Step 7: Peak Demand Savings Capacity | Peak Demand Savings Capacity = $((\text{Baseline Input Power} \times \text{Baseline Peak Adjustment Factor}) - (\text{Input Power} \times \text{Peak Adjustment Factor})) \times \text{Capacity Factor} \times \text{Firmness Factor}$ Baseline Input Power = 25.21 kW (Calculation Step 1) Baseline Peak Adjustment Factor = 1 (Calculation Step 2) Input Power = 9.202 (Calculation Step 3) Peak Adjustment Factor = 0.77 (Calculation Step 4) Capacity Factor = 1 (Calculation Step 5) Firmness Factor = 1 (Calculation Step 6) Peak Demand Savings Capacity = $((25.21 \times 1) - (9.20165 \times 0.77)) \times 1 = 18.1247$ |
| Step 8: Peak Demand Reduction Capacity | Equation 2a: Peak Demand Reduction Capacity = Peak Demand Savings Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Savings Capacity = 18.1247 kW (Calculation Step 7) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2a) Lifetime = 12 years (Activity Definition WH1) Peak Demand Reduction Capacity = $18.1247 \times 6 \times 12 = 1304.9784$ |
| Step 9: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 1304.9784 (Calculation Step 8) Network Loss Factor = 1.04 (Source: Table A3 of the PDRS Rule) Number of Certificates = $1304.9784 \times 1.04 \times 10 = 13,571.7754$ Number of Certificates = 13,571 |

C.4 RF2 – Replace an existing refrigerated cabinet with a new high efficiency refrigerated cabinet

| Step | Description |
|--|--|
| Scenario | The product meets the Equipment Requirements Location of implementation: Wollongong (Postcode: 2500) (Endeavour Energy distribution) |
| Product | The product meets the Equipment Requirements Location of implementation: Wollongong (Postcode: 2500) (Endeavour Energy distribution) The product is SKOPE Glass Door Display (TMF1000N-A), Integrated Freezer Vertical, Refrigerated Display Cabinet (GEMS Registry, Columns AA and AC) Total display area: 1.25m ² (GEMS Registry, Column M) Product type: IVF4 (GEMS Registry, Column AI) Product class: 8 (GEMS Registry, Column R or AJ) Energy Efficiency Index: 63.474 (Source: GEMS Registry, Column AE) Total Energy Consumption (kWh/24h): 16.17 (Source: GEMS Registry, Column AB) |
| Step 1: Baseline input power | Equation RF2.1: Baseline Input Power = TEC x af x [Baseline EEI + Product EEI] ÷ 24 TEC = 16.17 kWh/day (Source: GEMS Registry, Column AB) af = 1 (Source: Table RF2.1 of the PDRS Rule) Baseline EEI = 100 (Source: Table RF2.1 of the PDRS Rule) Product EEI = 63.474 (Source: GEMS Registry, Column AE) Baseline Input Power = 16.17 x 1 x [100 + 63.474] ÷ 24 = 1.06146 kW |
| Step 2: Baseline Peak Adjustment Factor | Equation RF2.3: Baseline Peak Adjustment Factor = Temperature Factor x Usage Factor Temperature Factor = 1.14 (Source: Table RF2.2 of the PDRS Rule) Usage Factor = 1 (Source: Activity Definition RF2) Baseline Peak Adjustment Factor = 1.14 x 1 = 1.14 |
| Step 3: Input Power | Equation RF2.2: Input Power = TEC x af ÷ 24 TEC = 16.17 (Source: GEMS Registry, Column AB) af = 1 (Source: Table RF2.1 of the PDRS Rule) Input Power = 16.17 x 1 ÷ 24 = 0.67375 kW |
| Step 4: Peak Adjustment Factor | Peak adjustment factor: equal to Baseline Peak Adjustment Factor (Source: Calculation Step 2) |
| Step 5: Firmness Factor | Firmness Factor = 1 (Source: Table A6 of the PDRS Rule) |
| Step 6: Peak Demand Savings Capacity | Peak Demand Savings Capacity = ((Baseline Input Power x Baseline Peak Adjustment Factor) – (Input Power x Peak Adjustment Factor)) x Firmness Factor Baseline Input Power = 1.06146 kW (Calculation Step 1) Baseline Peak Adjustment Factor = 1.14 (Calculation Step 2) Input Power = 0.67375 kW (Calculation Step 3) Peak Adjustment Factor = 1.14 (Calculation Step 4) Firmness Factor = 1 (Calculation Step 5) Peak Demand Savings Capacity = (1.06146 x 1.14) – (0.67375 x 1.14) x 1 = 0.4420 kW |
| Step 7: Peak Demand Reduction Capacity | Equation 2a: Peak Demand Reduction Capacity = Peak Demand Savings Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Savings Capacity = 0.4420 kW (Calculation Step 6) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2a) Lifetime = 8 years (Source: Table RF2.3 of the PDRS Rule) Peak Demand Reduction Capacity = 0.4420 x 6 x 8 = 21.216 kW |
| Step 8: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 21.216 kW (Calculation Step 7) Network Loss Factor = 1.05 (Source: Table A3 of the PDRS Rule) Number of Certificates = 21.216 x 1.05 x 10 = 222.768 Number of Certificates = 222 |

C.5 SYS2 – Install a new high efficiency pool pump or replace an existing pool pump with a high efficiency pool pump

| Step | Description |
|---|---|
| Scenario | Location: Blacktown (Postcode: 2148) (Endeavour Energy distribution) |
| Product | The product is Reltech PLTV5+ Star rating: 6 Speed: Variable Nameplate Input Power: 1400 W Warranty period: 3 years |
| Step 1: Baseline Input Power | Baseline Input Power = 1.2 kW (Source: Table SYS2.1 of the PDRS Rule) |
| Step 2: Input Power | Equation SYS2.1: Input Power = PAEC ÷ (365 x DRT) PAEC = 476.69 kWh/year (Source: GEMS Registry, Column L) DRT = 5.893 hours/day (Source: GEMS Registry, Column K) Input Power = 476.69 ÷ (365 x 5.893) = 0.2216 kW |
| Step 3: Peak Demand Savings Capacity | Peak Demand Savings Capacity = ((Baseline Input Power x Baseline Peak Adjustment Factor) – (Input Power x Peak Adjustment Factor)) x Firmness Factor Baseline Input Power = 1.2 kW (Calculation Step 1) Baseline Peak Adjustment Factor = 0.41 (Source: Table A4 of the PDRS Rule) Input Power = 0.2216 kW (Calculation Step 2) Peak Adjustment Factor = 0.41 (Source: Table A4 of the PDRS Rule) Firmness Factor = 1 (Source: Table A6 of the PDRS Rule) Peak Demand Savings Capacity = ((1.2 x 0.41) – (0.2216 x 0.41)) x 1 = 0.4011 kW |
| Step 4: Peak Demand Reduction Capacity | Equation 2a: Peak Demand Reduction Capacity = Peak Demand Savings Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Savings Capacity = 0.4011 kW (Calculation Step 3) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2a) Lifetime = 10 years (Activity Definition SYS2) Peak Demand Reduction Capacity = 0.4011 x 6 x 10 = 24.066 kW |
| Step 5: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 24.066 (Calculation Step 4) Network Loss Factor = 1.05 (Source: Table A3 of the PDRS Rule) Number of Certificates = 24.066 x 1.05 x 10 = 252.693 Number of Certificates = 252 |

C.6 BESS1 – Install a new behind the meter battery energy storage system

| Step | Description |
|---|---|
| Scenario | No existing battery at the site prior to installation. There is a solar photovoltaic system installed behind the meter at the site. Location: Mosman (Postcode: 2088) (Ausgrid distribution) |
| Product | The product is a pre-assembled integrated battery system, RedEarth SRS-120 (AS4777-2 2020) Equipment meets the Equipment Requirements |
| Step 1: Demand Shifting Component | Equation BESS1.2: Demand Shifting Component = Battery Capacity x 0.0853kW/kWh Battery Capacity = 16.4kWh (Source: Usable Battery Capacity from approved product list) Demand Shifting Component = 16.4kWh x 0.0853kW/kWh = 1.39892kW |
| Step 2: Peak Demand Shifting Capacity | Peak Demand Shifting Capacity = Demand Shifting Component x Firmness Factor Demand Shifting Component = 1.39892kW (Calculation Step 1) Firmness Factor = 1 (Source: Table A6 of the PDRS Rule) Peak Demand Shifting Capacity = 1.39892 x 1 = 1.39892kW |
| Step 2: Peak Demand Reduction Capacity | Equation 2b: Peak Demand Reduction Capacity = Peak Demand Shifting Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Shifting Capacity = 1.39892 kW (Calculation Step 2) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2b) Lifetime = 15 years (Activity Definition BESS1) Peak Demand Reduction Capacity = 1.39892 x 6 x 15 = 125.9028 kW |
| Step 3: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 125.9028 (Calculation Step 2) Network Loss Factor = 1.04 (Source: Table A3 of the PDRS Rule) Number of Certificates = 125.9028 x 1.04 x 10 = 1,309.3891 Number of Certificates = 1,309 |

Note that battery energy storage systems with a total useable capacity 2 kWh or less or 28 kWh or greater are not eligible for certificate creation, including for capacity up to 28kWh. See section 5.2.1 for more information.

C.7 BESS2 – Sign a behind the meter battery energy storage system up to a demand response contract

| Step | Description |
|---|--|
| Scenario | There is a solar photovoltaic system and a battery energy storage system installed behind the meter at the site. There is no life support equipment at the site. Location: Mosman (Postcode: 2088) (Ausgrid distribution) |
| Product | The battery at the site is a pre-assembled integrated battery system, RedEarth SRS-120 (AS4777-2 2020). The battery at the site meets the Equipment Requirements. |
| Step 1: Demand Response Component | Equation BESS2.2: Demand Response Component = Battery Capacity x 0.0647kW/kWh Battery Capacity = 16.4kWh (Source: Usable Battery Capacity from approved product list) Demand Response Component = 16.4kWh x 0.0647kW/kWh = 1.06108kW |
| Step 2: Peak Demand Response Capacity | Peak Demand Response Capacity = Demand Response Component x Firmness Factor Demand Response Component = 1.06108kW (Calculation Step 1) Firmness Factor = 1 (Source: Table A6 of the PDRS Rule) Peak Demand Response Capacity = 1.06108 x 1 = 1.0611kW |
| Step 2: Peak Demand Reduction Capacity | Equation 2c: Peak Demand Reduction Capacity = Peak Demand Response Capacity x Summer Peak Demand Reduction Duration x Lifetime Peak Demand Response Capacity = 1.0611 kW (Calculation Step 2) Summer Peak Demand Reduction = 6 hrs (Source: Equation 2c) Lifetime = 3 years (Activity Definition BESS2) Peak Demand Reduction Capacity = 1.0611 x 6 x 3 = 19.0998 kW |
| Step 3: PRCs | Equation 1: Number of Certificates = Peak Demand Reduction Capacity x Network Loss Factor x 10 Peak Demand Reduction Capacity = 19.0998 kW (Calculation Step 2) Network Loss Factor = 1.04 (Source: Table A3 of the PDRS Rule) Number of Certificates = 19.0998 x 1.04 x 10 = 198.6379 Number of Certificates = 198 |

Note that signing a battery energy storage system with a total useable capacity 2 kWh or less or 28 kWh or greater up to a demand response contract is not eligible for certificate creation under the PDRS, including for capacity up to 28 kWh. See section 6.1 for more details.

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- ¹ Cls 108 and 114 of Schedule 4A to the *Electricity Supply Act 1995*.
- ² Cl 83(1) of Schedule 4A to the *Electricity Supply Act 1995*.
- ³ Cl 5.1 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁴ Cl 61 of the *Electricity Supply (General) Regulation 2014*.
- ⁵ Cl 5.2(a) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁶ Cl 5.2(a) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁷ Cl 5.2(c) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁸ Cl 5.4 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁹ Cl 106(4) of Schedule 4A to the *Electricity Supply Act 1995*.
- ¹⁰ Cl 118(7) of Schedule 4A to the *Electricity Supply Act 1995* and cl 6.5 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ¹¹ Cl 117 of Schedule 4A to the *Electricity Supply Act 1995*.
- ¹² Cl 6.1(c) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ¹³ Cl 109(1) of Schedule 4A to the *Electricity Supply Act 1995*.
- ¹⁴ Cl 62S(2)(a) of the *Electricity Supply (General) Regulation 2014*.
- ¹⁵ Cl 7.1 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ¹⁶ Cl 6.1(b)(ii) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ¹⁷ Defined in cl 10 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ¹⁸ Cl 7.1.2, cl 7.1.5 and cl 8.1.4 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ¹⁹ Cl 9.1.3 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁰ Cl 5.1(b) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²¹ Cl 7.1.1(a), cl 8.1.1(a) and cl 9.1.1(a) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²² Defined in cl 10 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²³ Cl 7.1.4(a) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁴ Cl 5.3(a) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁵ Cl 5.3(b) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁶ Cl 8.1.1(f) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁷ Cl 9.1.1(f) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁸ Defined in cl 10 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ²⁹ Cl 7.1.1(b), cl 7.1.4(b), cl 8.1.1(b) and cl 9.1.1(b) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³⁰ Cl 7.1.1(d), cl 7.1.4(d), cl 8.1.1(d) and cl 9.1.1(d) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³¹ Cl 7.1.1(c), cl 7.1.4(c), cl 8.1.1(c) and cl 9.1.1(c) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³² Cl 114 of Schedule 4A to the *Electricity Supply Act 1995*.
- ³³ Cl 106(5) of Schedule 4A to the *Electricity Supply Act 1995*.
- ³⁴ Cl 9.1.4 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³⁵ Cl 6.2 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³⁶ Cl 7.1 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³⁷ Cl 8.1 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³⁸ Cl 9.1 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ³⁹ Cl 62ZB(1) of the *Electricity Supply (General) Regulation 2014*.
- ⁴⁰ Cl 133(1)(b) of Schedule 4A to the *Electricity Supply Act 1995*.
- ⁴¹ Cl 118(1) of Schedule 4A to the *Electricity Supply Act 1995*.
- ⁴² Cl 6.1(d) of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁴³ Cl 6.3 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁴⁴ Cl 6.2 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁴⁵ Cl 6.4 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁴⁶ Cl 6.8.3 and cl 6.8.4 of the *Peak Demand Reduction Scheme Rule of 2022*.
- ⁴⁷ Cl 3 of Schedule 3 of the *Electricity Supply (General) Regulation 2014*.
- ⁴⁸ Cl 62ZA of the *Electricity Supply (General) Regulation 2014*.
- ⁴⁹ Cl 117 of Schedule 4A to the *Electricity Supply Act 1995* and cl 62Z of the *Electricity Supply (General) Regulation 2014*.