



Peak Demand Reduction Scheme

Consultation Paper for Rule 1 – NCBA Submission

13 May 2022

Addressed to

Stephen Procter,

Strategic Delivery Manager, Sustainability Programs,

Energy, Climate Change and Sustainability

Office of Energy and Climate Change

Submitted via: sustainability@environment.nsw.gov.au

Submitted by

Contact details	
Name of organisation	National Carbon Bank of Australia Pty Ltd
Contact person	Adam Bertino
Phone number	0448 491 094
Email	adam@ncba.net.au
Postal Address	Unit 1a, 134-140 Old Pittwater Rd, Brookvale NSW 2100

Questions

1. What administrative processes could be improved by implementing better digital systems? How would that impact your organisation?

National Carbon Bank of Australia (NCBA) supports the intent of underpinning the implementation of digital systems, however, it is difficult to confirm the potential impacts on NCBA without viewing the system in operation.

2. Do you use systems managed by other organisations to deliver the ESS rules and/or would you use them for the PDRS? If so, which ones, and how do you use them?

3. Are there any digital tools, or specific software applications that could improve the PDRS customer experience or understanding of the PDRS? If so, what are they and how could they be used?

4. Would you use an open calculation API if it is made available? Why/why not?

No comment

5. Do you support the draft calculation approach and requirements for each of the technologies in the RDUE method? Please highlight positives and negatives, including any specific barriers to uptake of this activity. Space is provided in our online form for you to provide answers on each activity.

NCBA supports the Industry's position as articulated by the ESIA for WH1, RF1, RF2, SYS1 and SYS2. However, NCBA would like to bring to the Department's attention the calculation approach for HVAC1. NCBA has tested extensively a number of highly efficient air conditioning units currently installed across the State, and has noted that two popular units return negative PRC values, despite efficiencies well above the minimum standards as prescribed in PDRS Rule Table HVAC1.3 as well as ESS Rule Table D16.4.

For example, the Panasonic 6kW unit in the RZ XKW series (GEMS Model Number of CU-RZ60XKR / CS-RZ60XKRW) has a residential total cooling seasonal performance factor (TCSPF) 0.5w/w greater than the minimum requirements under the PDRS and ESS Rule. This factor, for reference, measures the ratio of total cooling provided to total electrical power used. However, in all eligible climate zones within NSW, a 'new' installation of this air conditioning unit would result in a negative PRC value, thus is not reflective of the improved cooling efficiency achieved and reduction of demand in peak times. This 6kW product is an extremely popular unit within other State-based incentive programs, especially within the ACT Scheme. The other unit returning a negative value is the Mitsubishi Electric 9kW unit (MUZ-AS90VGD/MSZ-AS90VGD), which has a TCSPF 0.3w/w greater than the prescribed minimum value in the PDRS Rule.

NCBA proposes that the Department update the PDRS Calculation Methodology for HVAC1, as well as HVAC2 for consistency, specifically the values within Tables HVAC1.1, 1.2, 2.1 and 2.2. NCBA understands that the Baseline Cooling EER values have been specified in these Tables to be used in the calculation of PRCs, which differs from the ESS Calculation Method that considers Baseline Cooling AEER values. NCBA proposes that the Department change Table HVAC1.1, 1.2, 2.1 and 2.2 to reflect the Baseline Cooling AEER figures, as this would remove the instances of negative PRC values for efficient units, as well as meet the goal identified within the Consultation Paper to align PDRS and ESS methodologies as much as possible; *"The proposed requirements for replacement and new air conditioner activities are aligned with the D16 requirements as much as possible to minimise the hurdles to participating in both the ESS and PDRS"* (p. 23).

6. Should the PDRS have a requirement for the installed End-User Equipment under HVAC1, HVAC2, WH1, WH2 and SYS2 to have DRM 1, 2 and 3 capability under AS/NZS 4755? What are the alternatives?

NCBA strongly believes that, for the activities identified in the PDRS Rule 1, there should not be any requirements for systems to be DRM 1, 2 or 3 capable as defined in AS/NZS 4755. The activities currently under consideration in the Draft PDRS Rule represent permanent demand reduction during peak times, and as such the presence of demand response capabilities within the EUE is irrelevant to the peak demand reduction capacity. Imposing this as a requirement would restrict the units eligible for PRC incentive, irrespective of their true peak demand savings capacity.

However, if the Department wishes to include this as a requirement, NCBA believes that sufficient notice is required for Industry to adjust and adapt to these new requirements. NCBA proposes that DRM capability is made a requirement on or after the start of the new compliance year, 1 April 2023.

7. Should the PDRS incentivise the replacement of continuous tariff hot water systems that are on off-peak or controlled load tariffs?

NCBA believes that the replacement of hot water systems in residential premises should be eligible for PRCs so long as the customer is on a continuous single rate tariff, as there is a significant portion of hot water systems that are on this tariff class. NCBA would recommend that the Customer demonstrates their tariff class by providing an Electricity Bill covering at minimum a 90-day period (approximately 3 months). This 90-day period could be covered by a single or multiple Electricity Bill(s), however, the final date of the period would need to fall within the previous six months at the time of implementation.

8. What aspects of the PDRS would you like to know more about, and what's the best way to provide this information to you?

NCBA is keen to understand the below key information in relation to the PDRS;

- IPART Registration Fee per PRC registered
- Data underpinning the values specified in the PDRS Rule, in particular Table A5 of the draft Rule

NCBA supports regular Consultation Forum's with the Department, as they provide a great opportunity to pose questions and learn more regarding the intention behind aspects of the PDRS.

9. What activities, technologies and business models are you most eager to see in the PDRS and why are these important to you?

NCBA is keen to see Measurement & Verification activities included in the PDRS. Whilst we are not accredited under the Project Impact Assessment Measurement & Verification (PIAM&V) method, we believe the nature of the methodology will deliver genuine and verifiable peak demand reduction, as well as provide a key additional incentive for the end-user, who typically must wait up to 18 months after project commissioning to receive any ESC/PRC returns. NCBA also support the inclusion of batteries into the PRDS program under phase two, incentivising peak demand shifting technologies.