



ENERGY SAVINGS SCHEME

Position Paper

2019-2020 Rule Change

January 2020



Published by NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Energy Savings Scheme Position Paper

Subtitle: 2019-2020 Rule Change

ISBN: 978-0-6483960-2-4

© State of New South Wales through Department of Planning, Industry and Environment 2019. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Planning, Industry and Environment as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (November 2019) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Planning, Industry and Environment), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Foreword

This paper explains the NSW Government's position on submissions received regarding the proposed changes to the Energy Savings Scheme (ESS) Rule. The changes are part of the NSW Government's commitment to continuous improvement of the ESS. The NSW Government sought input from stakeholders to ensure any adopted changes are appropriate and reflect industry standards.

This paper includes a summary of submissions received in response to the ESS Rule changes proposed in the public consultation, and an explanation of the Government's response and final Rule changes.

All Rule changes commence on 30 March 2020, unless stated otherwise.

Contents

List of Tables	4
Part One: Introduction	5
1.1 Why is the ESS Rule updated?	5
1.2 The Position Paper.....	5
Part Two: General Changes	8
2.1 Commencement date and transitional arrangements	8
2.2 Building Code of Australia (BCA) Climate Zone adjustments	10
2.3 Generating system limit adjustments.....	10
2.4 Creation of Energy Savings Certificates	11
2.5 ESC registration data collection requirements.....	12
2.6 Updates to referenced standards	12
Part Three: Project Impact Assessment with Measurement and Verification	15
3.1 Clarification of Energy Savings included in the PIAM&V method.....	15
3.2 Baseline Energy Model Measurement Procedures.....	16
3.3 Method Requirements Published by the Scheme Administrator	18
3.4 Update to Counted Energy Savings	19
Part Four: Metered Baseline Method	19
4.1 Updates to NABERS baseline method	19
Part Five: Deemed Energy Savings Methods	21
5.1 Updates to Sale of New Appliances (SONA) method	21
5.1.1 Proposed change to the appliance capacity bands and saving factors.....	21
5.1.2 Expand Activity Definition B5 to refrigerators with more than two doors.....	22
5.1.3 Changes to Activity Definitions.....	22
5.2 Updates to the Commercial Lighting Energy Savings Formula (CLESF)	23
5.2.1 Updates to space type and space type classifications	23
5.2.2 Updates to Maintained Emergency Lighting.....	25
5.2.3 Licensed electrician requirement	27
5.3 Updates to the Home Energy Efficiency Retrofit (HEER) method.....	28
5.3.1 Licensed electrician requirement	28
5.3.2 Replacing a T5 luminaire with an LED luminaire.....	29
5.3.3 Update to the Implementation Date of HEER activities	30
5.3.4 Update to Activity Definition E1.....	31
5.3.5 Light output and luminous efficacy.....	32
5.3.6 Change to four ESC minimum requirement.....	32
5.4 Installation of High Efficiency Appliances for Business.....	33
5.4.1 Update to Activity Definition F1	33
5.4.2 Update to Activity Definition F4.....	35

5.4.3	Update to Activity Definition F5.....	35
5.4.4	Update to Activity Definition F7.....	36
Part Six: Glossary		37

List of Tables

Table 1.2:1: Summary of changes from the proposed draft Rule	6
Table 2.1:1: Summary of commencement dates and transitional arrangements	9
Table 2.6:1 Summary of updated Standards following the publication of 2018 Rule	13
Table 5.4:1 Proposed amendment to refrigerated cabinet lifetimes	34

Part One: Introduction

The NSW Energy Savings Scheme (ESS) is the largest energy efficiency program in NSW. The ESS reduces electricity consumption in NSW by creating financial incentives for organisations to invest in energy savings projects. Energy savings are achieved by installing, modifying, removing, or replacing energy saving equipment.

The ESS works by placing an obligation on NSW energy retailers and other liable parties to each year surrender Energy Savings in the form of Energy Savings Certificates (ESCs). These certificates are created by Accredited Certificate Providers (ACPs) when energy users undertake eligible Energy Savings activities.

The *Electricity Supply Act 1995* (the Act) allows the Minister for Energy and Environment to approve rules that set out how ESCs can be created, including the eligibility of activities and the methods used for calculating Energy Savings. These rules are published in a document called the *Energy Savings Scheme Rule of 2009* (the ESS Rule).

1.1 Why is the ESS Rule updated?

The ESS Rule was first published in 2009. The 2014-2015 Review of the Scheme outlined government's intention to conduct annual updates to the ESS Rule. The updates intend to:

- incorporate stakeholder feedback and evaluation results;
- maintain the effectiveness of the ESS Rule through updates to savings factors, changes to the Rule requirements and adding activity schedules for new technologies;
- complement changes to building and equipment standards;
- incorporate new methods for Energy Savings; and
- make other enhancements to the ESS Rule to maintain its integrity and/or reduce transaction costs.

1.2 The Position Paper

As part of the annual review of the ESS Rule, the NSW Government conducted a targeted consultation on the proposed changes to the ESS Rule with a wide cross-section of ESS stakeholders between May and December 2018.

This targeted consultation was method-specific and included workshops on the Commercial Lighting Energy Savings Formula (CLESF), Project Impact Assessment with Measurement and Verification (PIAM&V) and NABERS methods; and written submissions on the Sale of New Appliances (SONA) method. Stakeholder feedback from this targeted consultation was considered when drafting changes to the ESS Rule for public consultation.

A month-long public consultation on the draft ESS Rule commenced in July 2019 and included an information forum on 8 August 2019.

22 written submissions to the public consultation were received from 22 stakeholders across the energy efficiency industry, including 14 ACPs, three consultancies, two Industry Associations, one appliance retailer, one product supplier and one local government authority. Public submissions are available on the energy.nsw.gov.au website.

Stakeholder feedback received during public consultation has been considered by the NSW Government in preparing this paper and appropriate changes have been included in the ESS Rule. This is described in more detail in the following sections. A summary of changes from the proposed draft Rule is provided in Table 1.2:1. This position paper responds to submissions addressing the questions raised in the consultation paper or those that

proposed minor changes to the Rule. Submissions on other topics will be considered in future Rule changes.

Table 1.2:1: Summary of changes from the proposed draft Rule

Method	Changes proposed in the Draft ESS Rule and consolation paper	Summary of Changes from the proposed draft Rule
General Changes	2.1 Commencement date and transitional arrangements	Revised transitional arrangements are updated in clauses 11.11-11.15
	2.2 Building Code of Australia (BCA) Climate Zone adjustments	Nil
	2.3 Generating system limit adjustments	Nil
	2.4 Creation of Energy Savings Certificates	Nil
	2.5 ESC registration data collection requirements	Nil
PIAM&V	3.1 Clarification of Energy Savings included in the PIAM&V method	Changes to Clause 7A.1 have been reverted
	3.2 Baseline Energy Model Measurement Procedures	Revised changes
	3.3 Method Requirements Published by the Scheme Administrator	Nil
	3.4 Update to Counted Energy Savings	Nil
NABERS	4.1 Updates to NABERS baseline method	Some amendments
SONA	5.1.1 Proposed change to the appliance capacity bands and saving factors	Transitional arrangements introduced in clause 11.14.
	5.1.2 Expand Activity Definition B5 to refrigerators with more than two doors	Nil
	5.1.3 Changes to Activity Definitions	New
CLESF	5.2.1 Updates to space type and space type classifications	Revised changes
	5.2.2 Updates to Maintained Emergency Lighting	Revised changes
	5.2.3 Licensed electrician requirement	Nil
	5.3.1 Licensed electrician requirement	Nil

Method	Changes proposed in the Draft ESS Rule and consolation paper	Summary of Changes from the proposed draft Rule
HEER	5.3.2 Replacing a T5 luminaire with an LED luminaire	Revised changes
	5.3.3 Update to the Implementation Date of HEER activities	Revised changes
	5.3.4 Update to Activity Definition E1	Revised changes
	5.3.5 Light output and luminous efficacy	Nil
	5.3.6 Change to four ESC minimum requirement	New
HEAB	5.4.1 Update to Activity Definition F1	Revised changes
	5.4.2 Update to Activity Definition F4	Nil
	5.4.3 Update to Activity Definition F5	Nil
	5.4.4 Update to Activity Definition F7	Revised changes

Part Two: General Changes

2.1 Commencement date and transitional arrangements

Refer to the ESS Rule: §1, §3, §11.11-11.15

The NSW Government proposed that:

- amendments to the ESS Rule would commence on 17 February 2020;
- an amendment notice would be published in the NSW Government Gazette approximately three months prior to the commencement date;
- ACPs would be able to register ESCs in accordance with the previous Rule until 30 June 2020, for Implementations with an Implementation Date before 17 February 2020.

In general, all submissions supported the proposed commencement date and the three-month notice period. One submission, however, noted that the proposed three-months will include the Christmas break, which reduces the actual preparation time. This submission also noted that three months may not be enough if new Rule clauses, that were not directly consulted on, were introduced.

In the context of deemed methods, two submissions supported the proposal to register ESCs created under the previous Rule by 30 June 2020. Three submissions, however, disagreed with this proposal. These submissions suggested to extend this deadline to 30 June 2021. Two of these submissions also proposed an alternative of commencing the new Rule on 1 January 2020, if the Rule was gazetted in October 2019.

Two submissions suggested that the notice period is too short for the magnitude of changes proposed for the Sale of New Appliances (SONA) method.

Five stakeholders raised concerns about transitional arrangements proposed for the Project Impact Assessment with Measurement and Verification (PIAM&V) method, particularly changes to clause 7A.5 of the consultation draft of the revised Rule.

One stakeholder suggested that the implementation of the proposed changes to Activity Definition F1 (Installation of High Efficiency Appliances for Businesses (HEAB) method) be phased in, in line with the enforcement of the relevant Determination in 2020, in order to mitigate the potential impact of these changes on refrigeration projects, currently planned to be completed throughout 2020.

Government response

The NSW Government will proceed with the proposed changes with some amendments.

Below is a summary of the general and method specific commencement dates and transitional arrangements.

Commencement date and gazettal

Due to the gazettal of the Rule in 2020, the new Rule will commence on 30 March 2020, providing approximately three months from gazettal to commencement.

ESC registration

In response to stakeholder feedback, the deadline to register ESCs calculated in accordance with the previous Rule has been extended to no later than six months after the end of the year in which relevant energy savings occur. For example, for deemed methods, ESCs from both an Implementation with an Implementation Date on 1 March 2020 and an Implementation with an Implementation Date on 1 April 2020 need to be registered by 30 June 2021.

More details on the application of the relevant version of the Rule for HEER Implementations is provided in section 5.3.3 of this paper.

PIAM&V, clause 7A.5A

In response to stakeholder feedback, the new clause 7A.5A will affect projects with an Implementation Date on or after 15 August 2020.

SONA

In response to stakeholder feedback, changes to the SONA method will commence on 15 August 2020. ESC registration deadline for Implementations with Implementation Date before 15 August 2020 is 30 June 2021.

HEAB, Activity Definition F1

In response to stakeholder feedback, changes to Activity Definition F1 will commence on 15 August 2020 to match the commencement of the Greenhouse and Emissions Minimum Standards (GEMS) (Refrigerated Cabinets) Determination. ESC registration deadline for Implementations with Implementation Date before 15 August 2020 is 30 June 2021.

Changes from the proposed Rule

Revised transitional arrangements are updated in clauses 11.11-11.15. A summary is provided in Table 2.1:1.

Table 2.1:1: Summary of commencement dates and transitional arrangements

Type of changes	Commencement date	Deadline for registering ESCs calculated in accordance with the previous Rule
All changes, excluding below	30 March 2020	No later than six months after the end of the year in which energy savings occur
PIAM&V, clause 7A.5A	15 August 2020	
SONA		30 June 2021
HEAB, Activity Definition F1		30 June 2021

2.2 Building Code of Australia (BCA) Climate Zone adjustments

Refer to the ESS Rule: Table A26

The NSW Government proposed to update Table A26: BCA climate zones by postcode to reflect recent changes to the Australia Post postcode list. The update requires restructuring the original postcode groupings to exclude any non-NSW postcodes or PO Box numbers and to include new postcodes.

Three submissions from one ACP, one product supplier and one Industry Association were received in response to the proposal to update Table A26 to exclude any non-NSW postcodes or PO Box numbers and to include new postcodes.

All stakeholders supported the proposal.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

2.3 Generating system limit adjustments

Refer to the ESS Rule: §5.4(i)(ii)

The NSW Government proposed that the current cap on generating system limits, as detailed in clause 5.4(i)(ii) be increased from 5MW to 30MW. This would align with AEMO's nameplate requirements for exempt and non-market, non-scheduled generators.

This would allow for incentivising larger generation systems, that are only utilised to respond to local electricity demand. Clause 5.4(i)(i), which excludes systems which export electricity to the Electricity Network from receiving incentives within the ESS, will remain unchanged.

Seven submissions were received in response to the proposal to increase the generating system limit within clause 5.4(i)(ii), including four ACPs, two Industry Associations and one local government authority.

One stakeholder supported the change to the generation limit as proposed.

One stakeholder supported this change and additionally stated their belief that if the relevant generation system did not export to the grid, there is no need to limit the nameplate rating of this system. This stakeholder further suggested, that, if the 30MW limit was placed, a

definition for “generating system” be introduced to ensure that the limit only applies to the Recognised Energy Saving Activity (RESA) and not to other generators at the site.

Four stakeholders supported this change but expressed that requiring no export for these systems may unnecessarily exclude systems which would occasionally export small quantities of energy due to changes in onsite generation and demand.

One stakeholder recommended some form of limit be replaced on export, to avoid the exclusion noted above. The other three stakeholders each suggest a limited that only five percent of the generated energy would be eligible for export.

Stakeholder submissions also expressed that this proposal could contribute to a significant number of ESCs being created by a single large project. However, it was also noted that there were unlikely to be large numbers of eligible sites.

Government response

The NSW Government will proceed with the proposed changes.

The NSW Government notes the support for removing the exclusion of exporting generators and the suggestion to remove the cap on generating system limits if the system does not export electricity.

However, amendments to the associated clauses 5.4(i) (i) and (ii) of the Rule may have significant impacts that have not been modelled or directly consulted on. In the absence of this, the NSW Government maintains its position that projects where electricity is exported, or larger projects, are generation activities and are therefore not eligible energy efficiency activities.

Changes from the proposed Rule

Nil.

2.4 Creation of Energy Savings Certificates

Refer to the ESS rule §6.5

The NSW Government proposed to amend Equation 1 of the ESS Rule by placing brackets around the Electricity Savings and Gas Savings sections of the formula. This would clarify the use of Equation 1 for the purpose of determining the relevant Number of Certificates an ACP can create in relation to a Recognised Energy Saving Activity (RESA).

Five submissions were received in response to this proposal, including four ACPs and one Industry Association.

Three submissions agreed that this change would remove any ambiguity from the use of Equation 1.

One submission suggested that the proposed change did not provide additional clarity to the equation and questioned whether adding brackets around each operation of the equation was more appropriate.

Another submission questioned where the ambiguity in the equation lay and whether the proposed change had any material impact on the usual use of Equation 1.

Government response

The NSW Government will proceed with the proposed changes.

In response to queries on the change, the NSW Government advise that in the previous formulation of Equation 1 it was not clear that the summation (Σ) applied to the Gas Savings part of Equation 1. The addition of brackets, as used in other parts of the Rule such as Equation 7A.1, intends to clarify that Gas Savings are included in this summation.

Changes from the proposed Rule

Nil.

2.5 ESC registration data collection requirements

Refer to the ESS Rule: §6.8

The NSW Government proposed to amend clause 6.8 which requires the collection of ABNs of the entity using the End-Use Service for all Implementations. The amendment requires ABNs of Appliance Retailers to be collected instead of the entity using the End-Use Service for Implementations under the Sale of New Appliances (SONA) method. This would reduce the administrative costs for ACPs.

One ACP commented on the proposal to amend ESC registration data collection requirements for the SONA method.

This stakeholder supported the proposal.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

2.6 Updates to referenced standards

Refer to the ESS Rule: §10.1, B4, B5, B6, C1, C2, D6, D7, D8, D9, F8, F9, F10, F11, F12, F13, F14, F15

The NSW Government proposes to update references to Australian Standards within the Rule, where updated versions of these Standards have been published.

A large number of standards (Table 2.6:1) within the Rule have been updated following the publication of the most recent version of the Rule in July 2018.

These updates do not affect the application of the relevant Standards within the Rule.

This list of standards is current as of 5 September 2019.

Table 2.6:1 Summary of updated Standards following the publication of 2018 Rule

Standard	Location of Standard in the Rule
AS/NZS 1359.5	10.1 - Definitions and Interpretations
AS/NZS 2293.1	10.1 - Definitions and Interpretations
AS/NZS 3000	10.1 - Definitions and Interpretations
AS/NZS 3814	F8 - Replace Existing Gas Fired Steam Boiler with a New High Efficiency Gas Fired Steam Boiler
AS/NZS 3814	F9 - Replace Existing Gas Fired Hot Water Boiler or Gas Fired Water Heater with a New High Efficiency Gas Fired Hot Water Boiler or a New Gas Fired Water Heater
AS/NZS 3814	F10 - Install an Oxygen Trim System or a Gas Fired Steam Boiler, Hot Water Boiler or Water Heater
AS/NZS 3814	F11 - Replace Burner on a Gas Fired Steam Boiler, Hot Water Boiler or Water Heater
AS/NZS 3814	F12 - Install an Economiser on a Gas Fired Steam Boiler, Hot Water Boiler or Water Heater
AS/NZS 3814	F13 - Install a Sensor Based Blowdown Control on a Gas Fired Steam Boiler
AS/NZS 3814	F14 - Install a Blowdown Flash Steam Heat Recovery System on Gas Fired Steam Boiler
AS/NZS 3814	F15 - Install a Residual Blowdown Heat Exchanger on Gas Fired Steam Boiler
AS/NZS 4474	C1 - Remove a Spare Refrigerator or Freezer
AS/NZS 4474	C2 - Remove a Spare Refrigerator or Freezer
AS/NZS 4474.1	B4 - Sell a High Efficiency 1-Door Refrigerator
AS/NZS 4474.1	B5 - Sell a High Efficiency Refrigerator with 2 or More Doors
AS/NZS 4474.1	B6 - Sell a High Efficiency Chest Freezer or Upright Freezer
AS/NZS 4474.1	C1 - Remove a Spare Refrigerator or Freezer
AS/NZS 4474.1	C2 - Remove a Spare Refrigerator or Freezer

Standard	Location of Standard in the Rule
AS/NZS 4474.2	B4 - Sell a High Efficiency 1-Door Refrigerator
AS/NZS 4474.2	B5 - Sell a High Efficiency Refrigerator with 2 or More Doors
AS/NZS 4474.2	B6 - Sell a High Efficiency Chest Freezer or Upright Freezer
AS/NZS 4474.2	C1 - Remove a Spare Refrigerator or Freezer
AS/NZS 4474.2	C2 - Remove a Spare Refrigerator or Freezer
AS/NZS 4859.1	D6 - Install Ceiling Insulation in an Uninsulated Ceiling Space
AS/NZS 4859.1	D7 - Install Ceiling Insulation in an Under-Insulated Ceiling Space
AS/NZS 4859.1	D8 - Install Under-Floor Insulation
AS/NZS 4859.1	D9 - Install Wall Insulation
AS/NZS 60598.2.5	Table A9.3 - Other Equipment Classes for Lighting Upgrades

Part Three: Project Impact Assessment with Measurement and Verification

NSW Government responses in this section address changes to the PIAM&V method proposed in the Rule Change consultation paper. A systematic review of the method will be conducted as part of the Major Rule Change process.

3.1 Clarification of Energy Savings included in the PIAM&V method

Refer to the ESS Rule: §7A.1

The NSW Government proposed to include an overarching addition to clause 7A.1 of the PIAM&V method. This addition would clarify the existing requirement that equations 7A.1 to 7A.5 are to be used for calculating Energy Savings that, to the satisfaction of the Scheme Administrator, are attributable to the PIAM&V Implementation only and represent a genuine reduction in the consumption of energy.

10 submissions commented on this proposal, including five ACPs, three consultancies, and two Industry Associations. Nine stakeholders disagreed and one partially agreed with the proposal.

Most of the stakeholders commented that including specific reference to the Scheme Administrator's satisfaction in this section would add complexity and risk to the method, with some commenting it may result in reduced uptake of the method.

One ACP highlighted that the proposed change is already covered in clauses 5.3 or 5.4.

A consultancy commented that the proposed change is inconsistent with clauses 5.3 and 6.5A (b) as the change introduces a definition of energy efficiency inconsistent with clause 5.3 and without the "reasonableness test" in clause 6.5A(b).

This submission further considered this change could undermine the role of the M&V Professionals to make technical assessments and instead shifts this responsibility to the Scheme Administrator. If the NSW Government is concerned with the operation of this role within the Rule, they suggest this may be better addressed as an administration issue (such as through training, feedback and guidance), rather than shifting responsibility to the Scheme Administrator via the Rule.

Government response

The NSW Government will not proceed with this change.

The intent of this change was to clarify an existing requirement that equations 7A.1 to 7A.5 are to be used for calculating Energy Savings that, to the satisfaction of the Scheme Administrator, represent a genuine reduction in the consumption of energy and are

attributable to the PIAM&V Implementation only. The proposed change was a clarification and did not propose to add additional powers to the Scheme Administrator.

Although most of the stakeholders did not support the change as proposed, the responses indicate a varied understanding of the current requirements of the Rule, the role of the Scheme Administrator and the role of the M&V Professional. These issues will therefore be further examined as part of the Major Rule Change process.

Regarding stakeholder feedback for more guidance, the NSW Government is addressing this through changes to clause 7A.16 (see Section 3.3).

Changes from the proposed Rule

Changes to Clause 7A.1 have been reverted.

3.2 Baseline Energy Model Measurement Procedures

Refer to the ESS Rule: §7A.A5, §11.12

The NSW Government proposes to specify that Measurement Procedures, in relation to the Baseline Energy Model, need to be deemed appropriate by a Measurement and Verification (M&V) Professional prior to the end of the Baseline Measurement Period. This would ensure that the M&V Professional is engaged in the early stages of an M&V project.

10 submissions commented on this proposal including six ACPs, two consultancies and two Industry Associations. Six stakeholders disagreed and four partially agreed with the proposal and many suggested alternatives.

One stakeholder supported the acceptance of Measurement Procedures by a M&V Professional prior to starting long measurement periods.

Most stakeholders commented that this change would significantly constrain their ability to choose a suitable baseline period. ACPs noted that this would restrict their ability to ensure the baseline period produced data suitable for a regression model and would add obstacles and costs.

For the *Measurement Procedures in relation to the Baseline Energy Model*, stakeholders requested variations (such as a change in the time period) be permissible after initial sign-off. These stakeholders further suggested that such variations be documented as an addition to the M&V Plan and post-upgrade be deemed appropriate by the M&V Professional. One ACP considered it impractical to have an M&V Plan written prior to the end of a baseline period.

Some ACPs disagreed with the proposal on the basis it would add costs and delays to projects due to the need to either engage an external M&V Professional or hire one. An Industry Association expressed concerns that the lack of independent M&V Professionals may result in delays to installations commencing or a failure for the Baseline Measure Procedure to be deemed appropriate prior to the completion of the Baseline Period.

Two stakeholders considered this requirement excessive, with one ACP describing the current Verification and Audit regime as more than adequate.

Two stakeholders requested more details on what would be considered sufficient written explanatory reasoning. One ACP queried whether the same M&V Professional could be used throughout the project.

Rather than sign-off prior to the end of the Baseline Measurement Period, three stakeholders supported a later date. Proposals included “prior to the installation commencing” or “prior to practical completion of the upgrade”.

Several stakeholders requested a longer transitional period as this change would affect active projects.

Government response

The NSW Government will proceed with a revised proposal.

The intent of this change to the Rule is to ensure the early engagement of M&V Professionals on PIAM&V projects. The NSW Government considers this an important step to help improve compliance outcomes by giving Energy Savers the opportunity to confirm that the appropriate inputs are being collected and utilised correctly for proposed energy models.

Noting the stakeholder concerns on the ability to choose a suitable baseline period and the support for utilisation of a later date, the NSW Government has amended the requirement to “prior to the Implementation Date”.

To alleviate stakeholder concerns that this change will affect current projects, the NSW Government has:

- extended the transitional arrangements associated with this change so that they only affect projects with an Implementation Date after 14 August 2020; and
- not used clause 11.11 from the consultation draft of the revised Rule and introduced the revised requirement in clause 11.12.

The NSW Government notes stakeholders’ feedback on what would be considered sufficient written explanatory reasoning from M&V Professionals and will work with IPART to review the involvement of M&V Professionals in providing explanatory reasoning.

Changes from the proposed Rule

Clause 11.11 from the consultation draft of the revised Rule has not been used. Transitional arrangements have been specified in revised clause 11.12.

Clause 7A.5(h) from the consultation draft Rule has been revised and changes specified in a separate clause (7A.5A).

3.3 Method Requirements Published by the Scheme Administrator

Refer to the ESS Rule: §7A.16

Clause 7A.16 provides that the Scheme Administrator may Publish, from time to time, Guides that detail acceptable and unacceptable approaches for Accredited Certificate Providers and M&V Professionals to meet the requirements of clause 7A of the ESS Rule. To incorporate stakeholder feedback and support the Scheme's integrity, the NSW Government proposes to amend clause 7A.16. The amendment emphasises that compliance with materials published by the Scheme Administrator is a requirement.

Seven submissions commented on this proposal, including three ACPs, two consultancies and two Industry Associations. Three stakeholders disagreed and four partially agreed with the proposal.

Stakeholders supported greater transparency and accountability on decision-making of the Scheme Administrator, and for further guidance on evidence requirements for the method.

Where the responses disagreed, or partially agreed with the proposal, the concerns centred on the lack of details provided on the process to develop and publish Method Requirements, including:

- the level of consultation in developing the Method Requirements;
- short transitional arrangements for guidance – as opposed to the transitional arrangements outlined in the Rule;
- publication with little to no notice;
- lack of consistency between the Method Requirements and the policy objectives of the Rule; and
- cost impact of unknown requirements, the inclusion of retrospective changes and the high frequency of publications creating a compliance burden for participants (especially those operating across multiple jurisdictions).

Government response

The NSW Government will proceed with the proposed changes.

The NSW Government acknowledges stakeholders' support for greater transparency, simplicity and reduced uncertainty in the method.

Stakeholder concerns on the development and publication of mandatory Method Requirements have been noted by the NSW Government and raised with the Scheme Administrator, IPART. IPART has assured the NSW Government it will consult adequately on the Method Requirements both with stakeholders and the NSW Department of Planning, Industry and Environment, and that the proposed amendments will ensure consistency between the current Rule and the Method Requirements as required by the amended Rule.

Changes from the proposed Rule

Nil.

3.4 Update to Counted Energy Savings

Refer to the ESS Rule: Equation 7A.1, Equation 7A.3

The NSW Government proposed to update the formula to calculate Energy Savings so that Counted Energy Savings are not multiplied by the Regional Network Factor twice.

One consultancy commented on this proposal and supported it.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

Part Four: Metered Baseline Method

4.1 Updates to NABERS baseline method

Refer to the ESS Rule: §8.8, §11.13, Table A20, Table A21

The NSW Government proposed several changes to the NABERS baseline method to activate the method, increase its additionality and encourage consistent energy efficiency performance over time. Broadly, the proposal includes limiting the use of calculation method 1 to a building's first NABERS rating only and introduction of forward ESC creation under calculation method 2. Please refer to "ESS 2018-2019 Rule Change consultation paper" Part 4 for the full proposal.

Five submissions were received in response to the proposed changes to the NABERS method, including three ACPs, one Industry Association and one local government authority.

Four submissions supported the changes as proposed.

One submission welcomed the introduction of forward ESC creation under calculation method 2 but disagreed with the changes proposed for calculation method 1.

This stakeholder noted two reasons why calculation method 1 should not be changed. First, the proposed changes would render high performing buildings ineligible although they outperform the benchmark. Second, changes to the NABERS Rating System could have unintended negative consequences to the ESS NABERS method, especially calculation method 2. In this case, the stakeholder suggested calculation method 1 could serve as a fall back.

This submission also included comments on calculation method 2. First, it proposed to allow the use of Historical Baseline NABERS rating obtained up to three years prior to the current rating, to account for a number of small energy efficiency improvements occurring over a longer period of time. Second, it was proposed to abandon changes to clause 8.8.4(c).

Another stakeholder suggested that the ESS should recognise Owners Corporations as a legal entity that can participate in the Scheme.

Government response

The NSW Government will proceed with the proposed changes with some amendments.

In response to stakeholder feedback, the NSW Government has introduced transitional arrangements for buildings currently creating ESCs under calculation method 1. These buildings will be able to create ESCs using the previous version of the Rule within the period finishing seven years from the end date of the Rating Period used to create ESCs using calculation method 1 for the first time. Buildings eligible to continue to use this method should use relevant Benchmark NABERS Rating Indexes of 2020 for years 2020-2022, which, consistent with the continual increase of the benchmarks over time, will increase by 0.5 star in 2023.

In contrast to NABERS Rating certificates for commercial buildings, certificates for apartment buildings do not specify the entity obtaining the certificate, instead the name of the building or strata plan number(s) is specified. Clause 8.8.6 currently provides that the Energy Saver is the person whose name is identified on the NABERS Rating certificate, as issued by the NABERS National Administrator (in respect of the NABERS Rating). This Energy Saver definition may hinder apartment buildings' participation in the ESS. Clause 8.8.6 has therefore been amended to accommodate the inclusion of building owners, such as Owners Corporations, not directly referred to on the NABERS certificate, as eligible Energy Savers under the ESS.

The NSW Government will proceed with the remainder of the proposed changes. Change to clause 8.8.4(c) is a simplification of the previous clause, which will also allow more flexibility to align with any changes to the NABERS Rating System.

Changes from the proposed Rule

Transitional arrangements and conditions for buildings eligible to continue to use the previous version of the Rule have been specified in clause 11.13.

Definition of Energy Saver has been changed in clause 8.8.6.

Clause 8.8.10 has been added to prevent the use of a NABERS Rating of the same (or lower value) to forward create ESCs again.

Part Five: Deemed Energy Savings Methods

5.1 Updates to Sale of New Appliances (SONA) method

5.1.1 Proposed change to the appliance capacity bands and saving factors

Refer to the ESS Rule: §11.14, Schedule B

The NSW Government proposed to amend the eligibility requirements for all appliance categories incentivised through SONA to ensure the ESS only incentivises the most efficient appliances for sale in NSW. This involved changes to the appliance capacity bands and energy savings factors for the activities under SONA.

Four submissions were received for the proposed changes to the appliance eligibility requirements, capacity bands and saving factors. These submissions came from one Industry Association, one appliance retailer and two ACPs.

One stakeholder supported the change, commenting that the proposal to increase the benchmark for eligibility would be effective in achieving its intent of promoting the sale of the highest efficiency appliances.

Three stakeholders raised concerns about the proposed change. These stakeholders believe that the SONA method is effective in creating additional energy savings and the proposal would reduce the number of energy efficient appliances sold in NSW.

Stakeholders commented that the magnitude of the change was too large, that the change would reduce the number of ESCs created under the method and not enough notice was given for the proposed change.

Three submissions were received in response to the proposed changes to the grouping of appliances so as to link them with the available sales data. All stakeholders supported the proposal.

Government response

The NSW Government will proceed with a revised proposal.

A review of the most recent national and NSW sales data shows that the sales of high efficiency appliances are no higher in NSW when compared to the Australian average or other states. The NSW Government will therefore amend the eligibility requirements for all appliance categories incentivised through the SONA method.

The intent of this change is to ensure the ESS only incentivises the most efficient appliances, to shift the market to sell more of these high efficiency appliances in NSW. This will ensure that future savings created under the Scheme are genuine and that the Scheme provides value to NSW.

When developing the proposed changes, the NSW Government invited stakeholders to provide initial feedback through a 1-month targeted consultation process in December 2018. A targeted SONA consultation paper was sent out to key SONA industry stakeholders. Submissions were invited in response to the proposal to update the deemed savings factors

and raise the eligibility requirements for SONA. Three submissions were received. Stakeholders did not raise any major concerns, nor did they not respond negatively to the proposal.

As part of the public consultation process, we further invited stakeholders to provide evidence of how the current method contributes to the sale of high efficiency appliances. Two responses were received, however the evidence provided did not demonstrate how the SONA method increased the sales of the more efficient appliances.

The SONA method will continue to be reviewed as part of the Rule Change process to ensure its effectiveness. As part of this process, stakeholders will be invited to provide submissions and supporting evidence to inform how the method can continue to drive the uptake of efficient appliances in NSW.

In response to stakeholders' request for more notice, the NSW Government will extend the current application of SONA until 14 August 2020 with the changes coming into effect on 15 August 2020. The deadline for ESC registration for Implementations with Implementation Date before 15 August 2020 will follow the vintage expiry deadline, i.e. 30 June 2021. This will provide appliance retailers the time to source and market the highest efficiency appliances eligible for certificate creation under the Rule.

Changes from the proposed Rule

Transitional arrangements have been specified in clause 11.14.

5.1.2 Expand Activity Definition B5 to refrigerators with more than two doors

Refer to the ESS Rule: Schedule B Activity Definition B5

The NSW Government proposed to update the name and description of Activity Definition B5 to allow refrigerators with more than two doors to be eligible under SONA. This proposed update would allow ACPs to calculate Energy Savings from selling eligible refrigerators with two or more doors.

Two submissions from one Industry Association and one ACP were received in response to the proposal to amend Activity Definition B5 to include refrigerators with more than two doors.

Both stakeholders supported the proposal.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

5.1.3 Changes to Activity Definitions

One stakeholder, an ACP, had additional suggestions for the SONA method, including:

- Correction of an error in the table in Activity Definition B4.

- Clarification of which Energy Star Ratings are being referred to in Activity Definition B7.

Government response

NSW Government has corrected the clerical error in Activity Definition B4 and changed the category from “Total volume \geq 200 litres to $<$ 300 litres” to “Total volume \geq 200 litres to $<$ 250 litres”. These category groupings have been proposed using available sales data.

For Activity Definition B7, Televisions imported for sale are required to meet Tier 2 Minimum Energy Performance Standards (MEPS) and Energy Rating Label requirements.

NSW Government has amended the eligibility requirements for the activity to specify that these energy star ratings refer to Tier 2 MEPS and labelling as set out in AS/NZS 62087.2.2:2011 and the Greenhouse and Energy Minimum Standards (Television) Determination 2013 (No. 2).

Changes from the proposed Rule

The correction for Activity Definition B4 has been made. The eligibility requirements for Activity Definition B7 have been expanded to clarify that the energy star ratings refer to Tier 2 MEPS and labelling.

5.2 Updates to the Commercial Lighting Energy Savings Formula (CLESF)

5.2.1 Updates to space type and space type classifications

Refer to the ESS Rule: §9.4, Table A10.2 and A10.3

The NSW proposed to amend the space type classifications under Schedule A to align with changes to the BCA, harmonise with Victorian Energy Upgrade (VEU) specifications and respond to stakeholder feedback.

Eight submissions were received on the proposed updates to the space type and space type classifications under the CLESF, including six ACPs, one manufacturer and one Industry Association.

Two stakeholders supported the proposal, supporting the alignment with the BCA and commenting that it will now be clearer which space types to choose for upgrades.

Six partially supported the proposal, with some concerns. These stakeholders suggested that the annual operating hours allocated to the space types “stairways, including fire-isolated stairways” and “lift cars” were inappropriate, considering the usage of these space types.

Stakeholders also requested clarity on the difference between the space types “storage”, “wholesale storage” and “BCA Class 7b”.

Stakeholders questioned the meaning and relevance of the term “with a vertical illuminance target of 160 lx” as applied to the “wholesale storage and display area” space type in Table A10.2: Operating Hours for Lighting Upgrades by space type.

A further comment was received on the absence of BCA Class 10a buildings in Table A10.3: Annual Operating Hours for Lighting Upgrades by building type.

Five stakeholders, four ACPs and one manufacturer, responded to the question of whether a three-month transitional period was enough time to become 'business ready' given the proposed changes.

Three stakeholders confirmed that the three-month transitional period was adequate.

One stakeholder explained it was not enough time, given the changes to the space types of stairways and lift cars. Another stakeholder responded that this was not enough time given that the transition period may be over the Christmas period.

Government response

The NSW Government will proceed with a revised proposal.

Annual Operating Hours of Stairways Space Type

Regarding the annual operating hours (hours per annum) of the space type "stairways, included fire-isolated stairways", if the lighting that is installed in this space type is un-switched maintained emergency luminaires, then stakeholders should use the annual operating hours given under the space type "Un-switched Maintained Emergency Luminaire" (8,500 hours per annum) in Table A10.2.

The annual operating hours (hours per annum) for the space type "Stairways, including fire-isolated stairways" has been changed to "See Table A10.3" to better represent the energy savings that would result from these types of upgrades.

Annual Operating Hours of Lift Cars Space Type

The annual operating hours (hours per annum) for the space type "Lift cars" has been changed to "See Table A10.3" to better represent the energy savings that would result from these types of upgrades.

Distinction between Storage and Other Space Types

The NSW Government has deliberately split "Storage" and "Wholesale storage and display area" into distinct categories to align with the BCA Table J6.2a which has different IPD requirements for each space type. Under the Rule, lighting upgrades must achieve an IPD that equals or is less than the maximum IPD for each space as defined in Part J6 of the BCA (clause 9.4.1(c)(iii)). The categories are separate and aligned with the BCA so that there is no confusion about which IPD requirements apply for space types.

"BCA Class 7b buildings" are "typically warehouses, storage buildings or buildings for the display of goods (or produce) that is for wholesale".¹ The BCA (Table J6.2a) regards "Storage" as its own and separate space type, for the purpose of assigning IPD. The "Wholesale storage and display area" space type refers to industrial spaces whereas the "Storage" category is intended to cover individual spaces that are not industrial.

Whole Storage Illuminance Target

The wording "with a vertical illuminance target of 160 lx" has been adopted from the National Construction Code 2019 Building Code of Australia Volume One Table J6.2a.

The NSW Government aims to align CLESF with the requirements under the BCA.

¹ NCC 2019 Building Code of Australia - Volume One, Part A6.7 (2)

BCA Class 10a Buildings

BCA Class 10a buildings are non-habitable buildings including sheds, carports and private garages.

NSW Government has amended Table A10.3 to include BCA Class 10a buildings with 1,000 annual operating hours and category A (Others) to align with the VEU specifications.

Other

Note also that the space type “Common rooms, spaces and corridors in a BCA Class 2 building” in Table A10.2 has been changed to “Common rooms, spaces, corridors, stairways and lift cars” for clarification that this category includes all common areas.

Changes from the proposed Rule

- The annual operating hours (hours per annum) and building/space group for the space type “Stairways, including fire-isolated stairways” has been changed to “See Table A10.3”.
- The annual operating hours (hours per annum) and building/space group for the space type “Lift cars” has been changed to “See Table A10.3”.
- The space type name “Common rooms, spaces and corridors in a BCA Class 2 building” has been changed to “Common rooms, spaces, corridors in a BCA Class 2 building (including stairways and lift cars)”.
- Table A10.3 has been amended to include BCA Class 10a buildings with 1,000 annual operating hours and category A(Others).
- The “Building Lighting” definition under Clause 10 has been amended to include BCA Class 10a buildings.

5.2.2 Updates to Maintained Emergency Lighting

Refer to the ESS Rule: §9.4, §10

The NSW Government proposed to update the Space Type of Maintained Emergency Lighting to “Un-Switched maintained emergency luminaire” and update the definition of maintained emergency lighting to align with the newly released standard AS/NZS 2293.1: *Emergency lighting and exit signs for buildings – System design, installation and operation*.

Six submissions, from four ACPs, one product supplier and one Industry Association, were received in response to the proposal to update the space type of maintained emergency lighting to align with the new standard AS/NZS 2293.1.

Two stakeholders supported the proposal, supporting the alignment with the new Australian Standard.

Four stakeholders partially supported the proposal, with some concerns. Stakeholders questioned whether emergency lighting installed with a lighting control device or with sensors would be considered un-switched maintained emergency luminaires.

The other main comment was that the asset lifetime for this space type should be amended to refer to the BCA classification of the surrounding space rather than the existing 7.3 years (for implementation not at a regional site).

Government response

The NSW Government will proceed with a revised proposal.

AS/NZS 2293.1 (section 1.5.31(b)) defines an un-switched maintained emergency luminaire as an emergency light or exit sign that cannot be turned on and off when mains power is present (i.e. not in emergency mode).

Where this definition is satisfied, the lighting is un-switched maintained emergency luminaires. The asset lifetime for this space type has been amended to refer to the BCA classification of the surrounding space to better reflect the energy savings associated with these upgrades. This has been done by amending the Building/Space Group in Table A10.2 from “Class A (Others)” to “See Table A10.3” for un-switched maintained emergency luminaire.

A new space type “Switched Maintained Emergency Luminaire with a control system listed in Table A10.4 or Table A10.4A” has been included in Table A10.2 with Annual Operating Hours of 8,500 hours per annum and a Building/ Space Group of “See Table A10.3”. This change is made in recognition of the operating hours of switched maintained emergency luminaires with control systems.

Control multipliers are provided in Table A10.4: Control Systems and Control Multipliers for Lighting Upgrades and Table A10.4A: Occupancy Sensor Control Multipliers for Lighting Upgrades for control systems and occupancy sensors that are installed as part of a lighting upgrade. If the luminaire is connected to a control system, the control multiplier factor must be applied in order to calculate energy savings. For unswitched maintained emergency luminaire, “Control Multiplier A” listed in Table A10.4A would not be applicable as these devices switch the luminaire on and off.

Changes from the proposed Rule

For the space type “un-switched maintained emergency luminaire”, the Building/ Space Group in Table A10.2 has been amended from “Class A (Others)” to “See Table A10.3”.

A new space type has been added in Table A10.2:

- “Switched Maintained Emergency Luminaire with a control system listed in Table A10.4 or Table A10.4A” with Annual Operating Hours of 8,500 and Building/Space Group “See Table A10.3”.

Clause 10 has been amended to include a definition of “Switched Maintained Emergency Luminaire” as defined in AS/NZS 2293.1. The definition of “Un-switched Maintained Emergency Luminaire” has been amended to reflect the wording used in the AS/NZS 2293.1 and to be consistent with the definition of “Switched Maintained Emergency Luminaire”.

Clause 9.4.1(i) has been amended to clarify that space types “Un-switched Maintained Emergency Luminaire” and “Switched Maintained Emergency Luminaire” in Table A10.4 do not apply unless the existing lighting End-User Equipment is an “Un-Switched Maintained Emergency Luminaire”.

5.2.3 Licensed electrician requirement

Refer to the ESS Rule: §9.4.1(d)

The NSW Government proposed updated wording that makes it clear that only qualified electricians and apprentices can perform the upgrades under the CLESF, as per the requirements of the *Home Building Act 1989*.

Five submissions, from three ACPs, one product supplier and one Industry Association, were received in response to the proposal to clarify who can perform lighting upgrades under the CLESF.

Three stakeholders supported the proposal, agreeing that this wording should cover all relevant qualified installers for lighting and that the amendment makes it clear that qualified electricians and apprentices can undertake upgrades if they meet the requirements of the legislation.

Two stakeholders partially supported the proposal. These stakeholders had concerns about the evidence requirements required from ACPs to prove the qualification of the person who performed the installation.

Other comments were that the responsible person for the upgrade should be clear; unlicensed persons and labourers should not be able to carry out upgrades without a qualified supervisor.

Government response

The NSW Government will proceed with the proposed changes.

The intent of the proposal is that the work undertaken aligns with the Home Building Act, which all electrical work must currently adhere to regardless of the wording in the Rule. It is not the intent to have labour hire perform electrical work.

Linking the installation requirement of the CLESF to the Home Building Act clarifies the qualification and supervision requirements by applying the same requirements that apply to upgrades outside of the ESS.

It is clear under Section 14 of the Home Building Act that the qualified supervisor is the person responsible for the works. The ACP is responsible for compliance with the Rule.

Guidance on accepted forms of evidence will be published by the Scheme Administrator.

Changes from the proposed Rule

Nil.

5.3 Updates to the Home Energy Efficiency Retrofit (HEER) method

5.3.1 Licensed electrician requirement

Refer to the ESS Rule: Activity Definitions E1, E2, E3, E4, E5, E11 and E13

The NSW Government proposed to amend the Implementation requirements for relevant activities under HEER to make it clear that only qualified electricians and apprentices can perform the upgrades, as per the requirements of the *Home Building Act*.

Five submissions, from three ACPs, one product supplier and one Industry Association, were received in response to the proposal to amend the Implementation requirements to make it clear that only qualified electricians and apprentices can perform the upgrades.

Four stakeholders supported the proposal, agreeing that this should cover all relevant installers and supporting the amendment to make it clear that qualified electricians and apprentices can perform the upgrades provided they meet the requirements of the legislation.

One stakeholder partially supported the proposal but outlined that it must be made clear that the person responsible for performing the upgrades should be the qualified licenced electrician who either performed the work or supervised the work.

Government response

The NSW Government will proceed with the proposed changes.

The intent of the proposal is that the work undertaken aligns with the Home Building Act, which all electrical work must currently adhere to regardless of the wording in the Rule.

Linking the installation requirement of the HEER method to the Home Building Act clarifies the qualification and supervision requirements by applying the same requirements that apply to upgrades outside of the ESS.

It is clear under Section 14 of the Home Building Act that the qualified supervisor is the person responsible for the works. The ACP is responsible for compliance with the Rule.

Guidance on accepted forms of evidence will be published by the Scheme Administrator.

Changes from the proposed Rule

Nil.

5.3.2 Replacing a T5 luminaire with an LED luminaire

Refer to the ESS Rule: Schedule E Activity Definition E13

The NSW Government proposed to introduce a new activity definition under the HEER method: Activity Definition E13, which allows for the replacement of T5 luminaires with LED luminaires. This was an energy savings opportunity identified by the NSW Government.

Seven submissions from five ACPs, one product supplier and one Industry Association were received in response to the proposal to introduce a new activity to upgrade T5 luminaires to LED luminaires. All stakeholders supported the proposal, welcoming the addition of this activity to recognise the energy savings achieved when a T5 fluorescent lamp is upgraded to LED.

However, concern was raised over the proposed light output of new end-user equipment being too high, resulting in overly bright lights and not matching the requirements of Activity Definition E5, given the similarity of end-user equipment between the two activities.

The six ACPs who raised these concerns commented that they were likely to use the method if the required light output requirement was changed to be more suitable for the activity.

Government response

The NSW Government will proceed with a revised proposal.

The NSW Government has amended light output requirement for Activity Definition E13 to be the same as the light output requirement for Activity Definition E5.

The NSW Government has amended the existing luminaire lengths in Tables E13.1 and E13.2 to accommodate varying T5 lamp lengths and to align with the lamp nominal length listed in AS 4782.2:2019 *Double-capped fluorescent lamps – Performance specifications*.² The NSW Government has made this amendment to the existing luminaire lengths in Activity Definition E5 as well for consistency and alignment with the standard.

Changes from the proposed Rule

The “light output of new end-user equipment (lm)” under Activity Definition E13 has been amended to match the light outputs listed in Activity Definition E5 for Tables E13.1 and E13.2.

In addition, the “existing luminaire” sizes in Activity Definitions E5 and E13 have been amended to match the lamp lengths listed in AS 4782.2:2019.

² Table 1 – Lamp efficacy requirements, pg. 4 of Part 2: Minimum Energy Performance Standard (MEPS)

5.3.3 Update to the Implementation Date of HEER activities

Refer to the ESS Rule: §9.8.2

The NSW Government proposed to amend the Implementation Date definition under clause 9.8.2 for clarification. The following wording was proposed: “*The Implementation Date is the earliest date that any End-User Equipment is installed under the Implementation*”.

Eight submissions from six ACPs, one product supplier and one Industry Association were received in response to the proposal to amend the Implementation Date definition.

Three stakeholders supported the proposal, commenting that the current definition is not suitable, is not clear and adds administrative burden.

Three stakeholders partially supported the proposal and two stakeholders did not support the proposal.

The concerns that were raised in response to this proposal included that the Implementation Date definition should be the same as that under CLESF to reduce confusion for installers and ACPs who work across both activities. The proposed definition could negatively affect the Vintage in which ESCs are registered and therefore ESCs could potentially be registered before works are completed. The proposal would also affect ACPs’ monthly reporting requirements to IPART.

Seven stakeholders, including five ACPs, one product supplier and one Industry Association, responded to the question of whether this change would present any difficulties with being nominated and generating ESCs for a work program. Of these, five stakeholders affirmed that this change would not present any difficulties while two stakeholders claimed that it would, questioning the evidence requirements for establishing the new Implementation Date.

Government response

The NSW Government will proceed with a revised proposal.

The NSW Government considers that an Implementation Date definition linked to the earlier stages of the upgrade is important to establish a clear and early relationship between the Purchaser and the ACP.

Noting stakeholder concerns on the evidence requirements and support for an Implementation Date definition that is more consistent with the other deemed methods, the NSW Government has amended the proposed definition. The new Implementation Date definition under the HEER method is “the date that the End-User Equipment is installed”.

ESC creation requirements will remain unchanged and will still require that all conditions of Clause 9.8.1 are met.

Transitional arrangements specified in the consultation draft of the revised Rule have been amended. For clarity, the amended clause 11.11 specifies that where the Implementation Date definition of the new Rule is met before 30 March 2020, i.e. where the End-User Equipment is installed before this date, the old Rule must be used to calculate ESCs. For

example, for an Implementation where the End-User Equipment is installed on 29 March 2020, the old Rule applies.

All 2020 vintage ESCs must be registered by 30 June 2021.

Changes from the proposed Rule

Clause 9.8.2 has been amended to: “The Implementation Date is the date that the End-User Equipment is installed”.

Amendments have been introduced to the general transitional arrangements’ clause 11.11.

5.3.4 Update to Activity Definition E1

Refer to the ESS Rule: Schedule E Activity Definition E1, Table E1.1 and E1.2

The NSW Government proposed to combine lamp only magnetic and electronic transformers in Tables E1.1 and E1.2 into a single category and apply an average savings factor. This would simplify compliance and reduce the cost of undertaking the activity.

Seven submissions from five ACPs, one product supplier and one Industry Association were received in response to the proposal to update Activity Definition E1 to combine the energy savings factors for magnetic and electronic transformers into a single category.

Five stakeholders supported the proposal, commenting that the change will simplify the compliance requirements, reduce complexity, cost and risk of error when undertaking Activity Definition E1.

One stakeholder partially supported the proposal raising concerns around evidence requirements, questions on the definition of LED lamp only replacements and whether they include ELV LED lamps.

The stakeholder requested that the NSW Government consider that the requirement to multiply the NLP of the installed LED product to obtain the LCP can affect the quantity of ESCs generated. This stakeholder also recommended that if the proposed Rule combined magnetic and electronic transformers, that the requirement to multiply the LED NLP be removed.

Seven stakeholders including five ACPs, one manufacturer and one Industry Association responded to the question of whether this change would result in reduced administrative costs for their business. Three stakeholders agreed, while two partially agreed and one disagreed. The concerns raised suggested costs would only decrease if the evidence requirements are reduced and the transformer factors from Table A9.4 were removed.

Government response

The NSW Government will proceed with a revised proposal.

As per Table A9.3: Other Equipment Classes for Lighting Upgrades, LED lamp only replacements could include ELV LED lamps. The definition of LED lamp only is provided in Table A9.3.

Evidence requirements will be published by the Scheme Administrator.

In response to the stakeholder request to remove the requirement to multiply the NLP of the installed LED product to obtain the LCP, the NSW Government have instead added a generic ballast factor of 1.165 in Table A9.4 for use in Activity Definition E1. This is an average of the separate factors for magnetic transformer and electronic transformer. This will remove the need for the separate calculations ACPs previously had to undertake to determine the LCP for installation with a magnetic transformer and the LCP for installation with an electronic transformer.

Changes from the proposed Rule

Table A9.4 has been amended to include Control Gear “Generic ballast (for use in Activity Definition E1 only)” with an LCP value of “1.165 x NLP as Published by Scheme Administrator” for the Equipment Class LED Lamp Only – ELV.

5.3.5 Light output and luminous efficacy

Refer to the ESS Rule: Schedule E Activity Definitions E2, E3, E5, E11, Table A9.4 and §10

The NSW Government proposed to use the consistent term “light output” to refer to light output and to amend the definition of “light output”. The NSW Government proposed to replace “lumen efficacy” with “luminous efficacy”. These changes were proposed for consistency and accuracy.

Four submissions from three ACPs and one Industry Association were received in response to the proposal to use consistent and accurate terminology throughout Schedule E. All stakeholders supported the proposal.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

5.3.6 Change to four ESC minimum requirement

A stakeholder suggested the deletion of clause 9.8.1(f) which requires the creation of a minimum of four ESCs if Implementations only consist of activities from Schedule E, unless the activities are delivered through a low-income energy program.

Government response

The NSW Government’s Household and Small Business Upgrade Program (HASBUP) has recently utilised ESS’s HEER method to incentivise a large number of household and small business lighting upgrades. The program established that a significant number of customers were unable to access the offer due the minimum four ESC requirement. The program also showed that the average number of ESCs created in a home and small business using the HEER method far exceeds the current minimum of four ESCs.

To allow more households and small businesses access the NSW Energy Savings Scheme, the NSW Government has removed this minimum four ESC requirement.

Changes from the proposed Rule

Clause 9.8.1(f) has been removed from the Rule.

5.4 Installation of High Efficiency Appliances for Business

5.4.1 Update to Activity Definition F1

Refer to the ESS Rule: Activity Definition F1, Table F1.1, F1.2

The NSW Government proposed to align Activity Definition F1 to the incoming Refrigerated Cabinets Greenhouse and Emissions Minimum Standards (GEMS) Determination 2019, registered on 15 August 2019. This would align the ESS Rule's product classes with the product classes defined within the Determination, introduce a three-star efficiency requirement for eligible products, and align the minimum energy requirements for eligible products with the minimum energy requirements defined in the rule.

Three ACPs commented on the proposal to align Activity Definition F1 with the Refrigerated Cabinets Greenhouse and Emissions Minimum Standards Determination 2019.

One of these submissions supported the proposal.

One submission enquired as to whether the units utilised for TEC (kWh/day) was aligned with the figure it was written as representing – the Annual Energy Consumption.

Another submission questioned whether utilising the same expected lifespan for Integral and Remote Cabinets was appropriate for this activity, citing the cost and logistics involved with replacing Remote Cabinets when compared to replacing Integral Cabinets.

It was suggested that increasing the lifetime of Remote Cabinets to a minimum of 12 years would be a more accurate representation of the energy savings that are created through installing efficient Remote Cabinets.

This submission also expressed that requiring cabinets to adhere to a three-star energy efficiency index (equivalent to $EEI < 77$) would have a significant impact on planned refrigerated cabinet installation projects throughout 2020, due to the high number of currently registered cabinets eligible for a two-star rating ($77 < EEI < 100$).

This submission recommended that phasing in the transition to the new requirements, by requiring eligible products to initially have an EEI of under 100, then requiring products to have an EEI of under 77 following the first year of this change, would allow the industry more time to respond to this change, and provide time for manufacturers to make improvements to their refrigerated cabinets.

Government response

The NSW Government will proceed with a revised proposal.

From 15 August 2020, Activity Definition F1 will require products to achieve an Energy Efficiency Index of under 77.

The NSW Government acknowledges that a clerical error introduced confusion around the units utilised for measuring TEC within Equation F1, as TEC was intended to represent daily total energy consumption, not annual energy consumption.

As such, this formula has been amended to remove this error.

The NSW Government recognises that the “high efficiency” definition currently used to define products as eligible for Activity Definition F1 was proposed for removal within the GEMS (Refrigerated Cabinets) Exposure Draft, which was publicly released in November 2018.

The NSW Government believes that the timeframe between the publication of the Exposure Draft and the enforcement of the Determination has given sufficient notice for businesses to move towards utilising an appropriate star rating and EEI for their refrigeration projects.

While a number of currently eligible cabinets fall between the two-star and three-star rating thresholds and will subsequently no longer be eligible under Activity Definition F1, lowering the threshold to two-stars would also lead to incentivising a significant number of cabinets which are not currently eligible for incentives.

As such, the baseline of three-stars for eligible cabinets will be introduced following the enforcement of the GEMS (Refrigerated Cabinets) Determination, in order to ensure the continuing incentivisation of activities which drive energy efficiency.

The NSW Government also accepts that the expected life span of Integral and Remote cabinets differs significantly, due to the complexity and cost involved with installing Remote cabinets, and the potential impacts of replacing these cabinets on businesses.

Therefore, the lifetime for Remote cabinets will increase to 12 years, to more accurately reflect the energy savings that are created over the lifespan of installing energy efficient Remote Refrigerated Cabinets. The lifetime for Integral cabinets will remain unchanged.

Changes from the proposed Rule

Changes to Activity Definition F1 will come into effect following the enforcement of the GEMS (Refrigerated Cabinets) Determination 2019, beginning 15 August 2020, as specified in clause 11.15.

The NSW Government also proposes that Table F1.2 be amended in order to account for the improving lifespan of remote cabinets. The proposed amendment is summarised in Table 5.4:1.

Table 5.4:1 Proposed amendment to refrigerated cabinet lifetimes

Refrigerated Cabinet Product Class	Temperature class	Lifetime (years)
Classes 1-11	All	8
Classes 12-15	All	12

5.4.2 Update to Activity Definition F4

Refer to the ESS Rule: Activity Definition F4, Table F4.1, F4.2

The NSW Government proposed to update the product classes, cooling capacities, cooling hours, baseline Annual Energy Efficiency Ratio (AEER) for cooling and Annual Coefficient of Performance (ACOP) for heating in Tables F4.1 and F4.2 in order to align with the newly released GEMS (Air Conditioners up to 65kW) Determination 2019.

Two ACPs commented on the proposal to update Activity Definition F4.

Both submissions support the proposed update.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

5.4.3 Update to Activity Definition F5

Refer to the ESS Rule: Activity Definition F5

The NSW Government proposed to remove the requirement for installed replacement equipment to be accepted by the Scheme Administrator. This was proposed to ensure consistency with Activity Definition F6.

Two submissions from ACPs were received in response to the proposal to remove the need for installed replacement products to be accepted by the Scheme Administrator under Activity Definition F5.

Both stakeholders support the proposed update.

Government response

The NSW Government will proceed with the proposed changes.

Changes from the proposed Rule

Nil.

5.4.4 Update to Activity Definition F7

Refer to the ESS Rule: Activity Definition F7

The NSW Government proposes to update the baseline efficiency figures contained within Table F7.3 of the Activity Definition, with the updated baseline efficiency figures published in the Greenhouse and Energy Minimum Standards (Three Phase Cage Induction Motors) Determination 2019.

Two submissions from ACPs were received in response to the proposal to update Activity Definition F7 in line with the updated GEMS (Three Phase Cage Induction Motors) Determination 2019.

One of these submissions support the proposed update.

One of these submissions disagreed with the proposed update. This submission stated that it is likely that the motors being upgraded will not appear on GEMS lists, due to the age and lifespan of motors replaced within this activity definition.

This submission also disagreed with updating to the newest GEMS Determination for the purpose of adhering to the updated baselines. This submission proposed that if a baseline motor does not appear on the GEMS list, then the lowest efficiency for that category of motor from the very first GEMS list should be used as the baseline.

Government response

The NSW Government will proceed with a revised proposal.

The NSW Government recognises that the age of the motors covered within this Activity Definition may mean that the motors eligible for replacement may not appear on GEMS lists.

However, the NSW Government also recognises the need to be consistent with its application of the GEMS Determinations across all the Activity Definitions for which these Determinations are relevant. Incentivising products based on the 2012 edition of the GEMS (Three Phase Cage Induction Motors) Determination would introduce inconsistency in the treatment of GEMS Determinations in the Rule.

The NSW Government also notes that a new version of the GEMS (Three Phase Cage Induction Motors) Determination was introduced following the publication of the draft Rule. This new version does not impact the Activity Definition as written, but the Rule text has been amended to include the updated date of this Determination.

Changes from the proposed Rule

The date of the GEMS (Three Phase Cage Induction Motors) has been amended from 2018 to 2019, in line with the updated version of the Determination published on 10 July 2019.

Part Six: Glossary

Acronym	Definition
ACOP	Annual Coefficient of Performance
ACP	Accredited Certificate Provider
AEER	Annual Energy Efficiency Ratio
AS/NZS	Australian/New Zealand Standard
BCA	Building Code of Australia
CLESF	Commercial Lighting Energy Savings Formula
EEI	Energy Efficiency Index
ESC	Energy Savings Certificate
ESS	Energy Savings Scheme
GEMS	Greenhouse and Emissions Minimum Standards
HASBUP	Household and Small Business Upgrade Program
HEAB	High Efficiency Appliances for Businesses
HEER	Home Energy Efficiency Retrofit
IPART	Independent Pricing and Regulatory Tribunal
LED	Light Emitting Diode
MEPS	Minimum Energy Performance Standards
M&V	Measurement and Verification
NABERS	National Australian Built Environment Rating System
NCC	National Construction Code
NSW	New South Wales
PIAM&V	Project Impact Assessment with Measurement and Verification
SONA	Sale of New Appliances
VEU	Victorian Energy Upgrades