IPART

Independent Pricing and Regulatory Tribunal
New South Wales

Lighting Equipment Requirements

Project Impact Assessment with Measurement & Verification (PIAM&V) Method and Metered Baseline Method (MBM)

Energy Savings Scheme

March 2020

The Independent Pricing and Regulatory Tribunal (IPART)

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Document Control

Version number	Change description	Date published
V1.0	Initial release – following gazettal of ESS Rule Amendment	July 2018
V1.1	Updates following amendments to the ESS Rule	March 2020

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1 About this document

The NSW Energy Savings Scheme (**ESS**) seeks to reduce energy consumption in NSW by creating financial incentives for organisations to invest in energy saving projects.

The other objects of the ESS are to:

- assist households and businesses to reduce energy consumption and energy costs
- make the reduction of greenhouse gas emissions achievable at a lower cost, and
- reduce the cost of, and need for, additional energy generation, transmission and distribution infrastructure.[1]

Electricity retailers and other mandatory participants (**Scheme Participants**) are obliged to meet energy saving targets. Energy savings can be achieved by installing, improving or replacing energy saving equipment. Persons that become Accredited Certificate Providers (**ACPs**) can create energy savings certificates (**ESCs**) from these activities and then sell those ESCs to Scheme Participants. The Independent Pricing and Regulatory Tribunal of NSW (**IPART**) is both the Scheme Administrator and Scheme Regulator of the ESS.[2]

This document provides guidance about the equipment requirements that apply to lighting equipment under the Project Impact Assessment with M&V (**PIAM&V**) Method and Metered Baseline Method (**MBM**), and how to apply to have lighting equipment accepted as meeting these requirements.

This document should be used by persons seeking to have lighting equipment accepted as meeting these requirements. This includes ACPs, and other persons such as businesses that manufacture, supply or distribute lighting equipment in NSW for purposes including use in implementations under the ESS.

1.1 Legislative requirements

This document is not legal advice. The legal requirements for ACPs participating in the ESS are set out in:

- Part 9 of the *Electricity Supply Act 1995* (**Act**)
- Part 6 of the *Electricity Supply (General) Regulation 2014* (**Regulation**), and
- the *Energy Savings Scheme Rule of 2009* (**ESS Rule**).

ACPs are also required to meet any additional accreditation conditions as set out in their Accreditation Notice.

1 *Electricity Supply Act 1995*, section 98(2).
2 *Electricity Supply Act 1995*, sections 153(2) and 151(2).

1.2 Related documents

The following documents provide further information on the PIAM&V Method and MBM:

- Method Guide – PIAM&V, and
- Method Guide – MBM.

2 Product application process

2.1 When you need to submit an application

You **do not** have to submit an application for acceptance of lighting equipment as meeting the PIAM&V/MBM equipment requirements (see section 3 of this document) if the lighting equipment:

- is accepted for use under the Commercial Lighting Energy Savings Formula (**CLESF**) or the Home Energy Efficiency Retrofits (**HEER**) methods, or
- is within a standard equipment class (as listed and defined in Table A9.1 of Schedule A to the ESS Rule), which includes linear fluorescent lamps, compact fluorescent lamps, metal halide lamps and high pressure sodium lamps.

You **do** have to submit an application for acceptance if the lighting equipment:

- is not accepted for use under the CLESF or HEER methods, and
- is within an 'other equipment class' (as listed and defined in Table A9.3 of Schedule A to the ESS Rule)[3], which includes light emitting diode (**LED**) lamps and luminaires, and induction luminaires, except Extra Low Voltage (**ELV**) LED lamps designed to be installed with the existing transformer/control gear left in place.

Before ESCs can be created, the equipment in a lighting upgrade must be accepted for use under the PIAM&V/MBM, the CLESF or the HEER Method (unless the equipment is within a standard equipment class).

Box 2.1 Product acceptance under the CLESF and HEER methods

Lighting equipment that we have accepted for use under the CLESF and HEER methods is shown on the CLESF Public List and the HEER Public List respectively. These lists can be viewed on our website. The CLESF Public List can also be viewed in the ELT Portal, our web based system for managing lighting equipment acceptance under the CLESF.

A product that **only** appears on the PIAM&V/MBM Public List does **not** meet the full requirements of the CLESF or HEER methods. You must submit separate applications to use the product under the CLESF or HEER methods.[a]

[a] For details of the application process under the CLESF and HEER methods, refer to the 'Lighting Equipment Requirements – CLESF' and the 'Lighting Equipment Requirements – HEER Method' documents, see: www.ess.nsw.gov.au/Home/About-ESS/Lighting-equipment-requirements.

3 This equipment is also referred to as emerging lighting technologies, or ELTs.

2.2 Applying for acceptance of lighting equipment

Check that the product is not already on our Public Lists before submitting an application for ESS product acceptance.

The application process varies depending on whether or not the lighting equipment is approved for use in the Victorian Energy Upgrades (**VEU**) program,[4] which is administered by the Victorian Essential Services Commission (**ESC**).

2.2.1 Applying for acceptance via the standard PIAM&V/MBM pathway

If the equipment is not currently approved by the ESC as meeting the requirements of Schedule 34 of the VEU program, you must submit an application to us via our standard PIAM&V/MBM pathway.

An application for acceptance of a product must be submitted through the ESS Lighting Mailbox (esslighting@ipart.nsw.gov.au) and include the text 'PIAM&V/MBM product application' in the subject line.

An application must include information about the product and the supporting documents to demonstrate that the product meets the equipment requirements, as outlined below.

Applicants must check that the documents they submit meet the requirements, and that the information is consistent (ie, all documents are for the same brand name and model numbers). If the application includes documents from third parties (eg, electrical safety certificates), applicants must also take steps to confirm the veracity of those documents. For example, some laboratories' websites allow you to check the veracity of reports. Applicants may also contact the author of a report to confirm that it is valid.

2.2.2 Applying for acceptance via the VEU pathway

If your equipment is currently approved by the ESC as meeting the requirements of Schedule 34 of the VEU program, you may submit an application for ESS product acceptance via our VEU pathway. This is a more streamlined process than our standard application pathway, due to the commonality between the ESS and the VEU program.

An application for acceptance of a product via the VEU program pathway must be submitted through the ESS Lighting Mailbox (esslighting@ipart.nsw.gov.au) and include the text 'VEU program product application – PIAM&V/MBM' in the subject line. The application must include the brand and model number, the VEU program product category of the lighting equipment, and a specification sheet for the product.

If we decide after assessing the application that the product meets the equipment requirements, it may be accepted for use in the ESS and added to the PIAM&V / MBM Public List.

4 The VEU program is similar in design to the ESS and has similar requirements for lighting equipment.

2.3 Processing applications

If we accept the equipment as meeting the relevant requirements, we will email you notifying you that the product has been accepted, and it will be included on the PIAM&V / MBM Public List.

Should we require additional information to assess your application, we will send you a request for further information (**RFI**).

We will send a maximum of two RFIs before making a decision about whether to accept the product. Our decision will be based on all of the information provided throughout the application process. If the information does not meet the requirements, the application for acceptance may be refused by the Scheme Administrator. A new application may be submitted at a later date once all documents are in order.

Responses to RFIs must be submitted within 90 days. If an applicant does not respond to an RFI within 90 days then the application may be withdrawn by the Scheme Administrator. A new application may be submitted at a later date.

3 Equipment requirements

This section outlines the application documentation and equipment requirements. All of the equipment requirements relate to safety.

3.1 Electrical safety

You must demonstrate that the product complies with the NSW electrical safety requirements. There are three options that could apply. Choose the option that is appropriate to the product.

1. If the control gear being used with the product is a declared article (refer below) you must attach an *Australian Certificate of Approval* for the control gear / driver / lamp that is produced by either NSW Fair Trading or another certification body listed as a Recognised External Approval Scheme (**REAS**).[5] Please note that we do not accept certificates of approval or approval marks that are issued outside Australia.
2. If the control gear being used with the product is not a declared article, you must attach an *Australian Certificate of Suitability* for your luminaire. We will accept either:
   - a Certificate of Suitability issued by NSW Fair Trading or another certification body listed as a REAS, or

     a JAS-ANZ endorsed Certificate of Suitability that complies with JAS-ANZ's *Policy 06/13 – Certification of Non-Declared Articles classified as Emerging Lighting Technologies in the ESS*.[6]

5 Refer to: www.fairtrading.nsw.gov.au/help-centre/online-tools/approved-electrical-articles-register.
6 Refer:www.jas-anz.org/australian-and-new-zealand-electrical-equipment-safety-system-equipment-safety-rules

3. If you are only applying for acceptance of an Extra Low Voltage (**ELV**) lamp, and the application does not include the control gear / driver, you do not need to supply an electrical safety certificate.

Declared articles are as per the published NSW electrical safety requirements for a power supply.[7] A power supply (eg, control gear) is a declared article if it:

- provides an output not exceeding 50 volts a.c. or 120 volts ripple free d.c., and
- is a type to provide supply to separate luminaires.

The control gear is considered separate to the luminaire if a person can easily separate the:

- electrical connection between the control gear and the luminaire, and
- physical connection between the control gear and the luminaire.

Therefore, if the control gear provides an output not exceeding 50 volts a.c. or 120 volts ripple free d.c., and is of a type to supply separate luminaires, the control gear is a declared article and you will also need to supply a Certificate of Approval for the control gear.

7 Refer to: www.fairtrading.nsw.gov.au and search for 'Explanatory notes for the approval and sale of electrical articles in New South Wales'

Appendices

A Summary of requirements

		Specifications	Electrical Safety	
Required Documentation		**Data/Specification Sheet** (NB required for each product or component)	**Australian Certificate of Approval**	**Certificate of Suitability**
Category	**Relevant Australian Standard**			
LED Lamp only - ELV	Not applicable			
LED Lamp only - 240V Self Ballasted	**AS/NZS 62560**	Yes	lamp	
Induction Luminaire	**AS/NZS 60598.1**	Yes		for luminaire[1]
LED lamp and driver	**AS/NZS 61347.1 and IEC 61347.2.13**	Yes	for control gear, if control gear is a declared article[2]	for luminaire,[1] if control gear is not a declared article[2]
Modified Luminaire - LED Linear Lamp	**AS/NZS 60598.2.1or AS/NZS 60598.2.2**			
LED Luminaire - fixed type	**AS/NZS 60598.2.1**			
LED Luminaire - Linear Lamp	**AS/NZS 60598.2.1or AS/NZS 60598.2.2**			
LED Luminaire - floodlight	**AS/NZS 60598.2.5**			
LED Luminaire - recessed	**AS/NZS 60598.2.2**			
LED Luminaire - high/lowbay	**AS/NZS 60598.1**			
LED Luminaire - streetlight	**AS/NZS 60598.1 and AS/NZS 1158.6 or IEC 60598-2-3**	Yes	for control gear, if control gear is a declared article[2]	for luminaire,[1] if control gear is not a declared article[2]
LED Luminaire - emergency lighting[3]	**AS/NZS 60598.2.22**			
LED Luminaire - hospital use	**AS/NZS 60598.2.25**			
Voltage Reduction Unit	**AS/NZS 60335.1**	Yes		Yes

Electrical Safety	All electrical goods sold in NSW must meet the requirements of the *Electricity (Consumer Safety) Act 2004* and be safe to use.
Australian Certificate of Approval	A certificate confirming that a Declared Article meets Australian safety standards. A Recognised certificate (which could be a State Approval Number, or from a recognised independent certifier) must be submitted.
Certificate of Suitability	A certificate from a state or territory Government Safety Regulator (eg, Fair Trading NSW), or a JAS-ANZ endorsed certificate to evidence the electrical safety of Non-Declared Articles. A JAS-ANZ endorsed certificate is a certificate issued by a JAS-ANZ accredited certification body that displays the JAS-ANZ symbol. The certificate must reference the relevant Standard.

Notes

1. A luminaire is defined as an apparatus that distributes, filters or transforms the light emitted from a light source, including Lamps, Control Gear and all components necessary for fixing and protecting the Lamps, including the troffer.

2. The control gear is a declared article under the published NSW electrical safety requirements if it provides an output not exceeding 50 volts a.c. or 120 volts ripple free d.c., **and** is a type to provide supply to separate luminaires.

3. Emergency Lighting with multiple power modes must be tested at full output power.