

Commercial Lighting Upgrade; Commercial Only	Activity No.
	CL1

1. ACTIVITY SPECIFIC DEFINITIONS

Commercial Lighting is defined as lighting equipment in use in South Australia for the purpose of:

- lighting for roads and public spaces
- traffic signals
- lighting for commercial or industrial premises classified under the National Construction Code of Australia as either Class 3, 5, 6, 7, 8, 9, 10 or the Common Areas of Class 2.

Commercial Lighting Calculation Tool means either the ESS Calculation Tool (version 8.0, published 8 May 2023) or another calculation tool determined by the Minister.

Control Gear means the lighting ballast, transformer or driver.

ELV means extra low voltage, not exceeding 50 volts alternating current (AC) or 120 volts ripple free direct current (DC), as defined in AS/NZS 3000 (Wiring Rules).

Energy Savings Scheme Rule of 2009 means the version of the *Energy Savings Scheme Rule of 2009* made under the ESS effective from 12 September 2025.

ESS means the NSW Energy Savings Scheme established under the *Electricity Supply Act 1995*.

Existing Lighting Equipment means the equipment that provides lighting services that was already installed and in working order at the time of implementation of the Activity, including luminaires and/or lamps, control gear, and control systems.

Large Energy Consuming Customer means a customer consuming more than 160 MWh of electricity per National Meter Identifier in the 12 months prior to the upgrade.

NCC means the National Construction Code.

New Lighting Equipment means the equipment that provides lighting services that is installed as a result of the Upgrade for the purpose of the Activity, including luminaires and/or lamps, Control Gear, and control systems.

Upgrade means the replacement and/or modification of Existing Lighting Equipment with New Lighting Equipment resulting in a reduction in the consumption of electricity compared to what would have otherwise been consumed.

2. ACTIVITY DESCRIPTION (SUMMARY)

The Activity involves an upgrade to the energy performance of Commercial Lighting that results in REPS gigajoules as calculated in accordance with this specification.

3. ACTIVITY ELIGIBILITY REQUIREMENTS

- (1) The existing lighting equipment must be in working order at time of the upgrade.
- (2) The following activities are excluded:
 - New lighting installations undertaken as part of new work or refurbishments that require development approval under the *Planning, Development and Infrastructure Act 2016*.

- Task lighting installations such as portable lighting or desk lamps.
 - Installing T5 adaptor kits or installing new lamps into existing T5 adaptor kit fittings.
- (3) Where it can be demonstrated that the lamps being replaced have not previously been installed for the purposes of REPS, Activity CL1 can be delivered twice per premises, providing all other aspects of the specification are met.

Additional requirements where the recipient of the activity is a large energy consuming customer

The recipient of the Activity must cause payment to the installer for the goods and services provided, with the minimum payment requirement being \$1.70 (including GST) per normalised REPS credits as calculated in accordance with this specification.

4. INSTALLED PRODUCT REQUIREMENTS

- (1) The new lighting equipment must come with a minimum 2-year replacement warranty, and new High Bay lighting with a minimum 5-year replacement warranty.
- (2) At the time of installation, the new lighting equipment must be:
- on the list of commercial lighting method Accepted Products under the ESS, as published by the ESS Administrator, or a list determined by the Minister; or,
 - an LED linear tube product that is listed on the Victorian Energy Upgrades Program Product Register and complies with all relevant requirements of AS/NZS 60598.2.1 (Luminaires, Part 2.1: Particular requirements – Fixed general purpose luminaires), including amendments.
- (3) Control gear for linear fluorescent lamps manufactured in or imported into Australia must comply with the requirements of AS/NZS 4783.2 (Performance of electrical lighting equipment – Ballasts for fluorescent lamps, Part 2: Energy labelling and minimum energy performance standards requirements).

5. MINIMUM INSTALLATION REQUIREMENTS

- (1) The Activity must be performed by a licensed electrical worker under the supervision of a licensed electrical contractor.
- (2) The Activity must be completed and certified in accordance with any relevant code or codes of practice and other relevant legislation applying to the Activity, including any licensing, registration, statutory approval, Activity certification, health, safety, environmental or waste disposal requirements.
- (3) Where relevant, the Activity must achieve the relevant requirements of:
- AS 2293 (Emergency escape lighting and exit signs for buildings)
 - AS/NZS 1158 (Lighting for roads and Public Spaces)
 - AS 2144 (Traffic signal lanterns).
- (4) Where linear fluorescent luminaires are modified to accept linear LED tubes, a Certificate of Compliance must be provided and retained for verification purposes. The Certificate of Compliance must define the modification work for each type of linear fluorescent luminaire, specify that the modification work include electrical isolation of the legacy ballast (and capacitor if one was present), and specify that the work was performed in accordance with the safety requirements of AS/NZS 60598.2.1 (Luminaires, Part 2.1: Particular requirements – Fixed general purpose luminaires).

- (5) All removed lighting and equipment must be removed in accordance with the Environment Protection (Waste to Resources) Policy 2010 under the *Environment Protection Act 1993*. No fluorescent lighting or any other lighting that contains mercury is to be disposed of to landfill.
- (6) Where linear LED tubes are installed in accordance with the instructions provided with the LED tube, but without removal of legacy ballasts and/or capacitors, installers must:
- Measure and assess the true power factor of the upgraded lighting circuit, with the aim to show the upgrade should not have a detrimental impact on the customer's compliance with:
 - Section 6.2.2 of SA Power Networks' Service and Installation Rules. This requirement can be met by any reasonably verifiable and technically sound means proposed by the installer; and,
 - AS/NZS 3000(Wiring Rules).
 - Obtain ESCOSA approval for the proposed power factor measurement and assessment methodology prior to proceeding with the installation. Once approved, a methodology can be used across multiple installations, providing the methodology does not change. Evidence that a methodology is approved by the Essential Services Commission of Victoria for the purposes of the Victorian Energy Upgrades program will be sufficient to meet this installation requirement.
- (7) Each space, after implementation of the Lighting Upgrade, must achieve:
- the relevant requirements of AS/NZS 1680.4 (Interior and workplace lighting, Part 4: Maintenance of electric lighting systems)4.
 - the requirements of the NCC 2022 Volume One Part F6 (Light and ventilation) F6D5 (Artificial lighting).
 - an Illumination Power Density that equals or is less than the maximum Illumination Power Density for each space, as defined in Part J7 (Artificial lighting and power) of the NCC 2022 Volume One.

Additional requirements where recipient of the activity is a small energy consuming customer:

- (8) Where the new lighting installed equipment causes sub-optimal operation, or has not been completed to the demonstrated satisfaction of the recipient with regards to the colour temperature, colour rendering and the illumination levels of the new lighting, the installer shall either reinstall equipment equivalent to the original equipment or replace any components of the equipment that are causing the installation not to operate, at no expense to the recipient. Such a request for reinstatement must be acted upon if made within 20 business days of the installation of the new equipment.
- (9) The installer must make best endeavours to avoid compromising lighting service levels, and lux levels must be maintained at least at the levels prior to the Activity.

6. REPORTING REQUIREMENTS

For verification purposes, the following records will be retained in relation to the Activity:

- (1) Site Name.
- (2) Site Address.
- (3) The classification of the commercial premises in accordance with Australian and New Zealand Standard Industrial Classification (ANZSIC) codes at the divisional level.

- (4) Date of Activity.
- (5) REPS gigajoules calculated in accordance with the REPS gigajoules requirements in this specification.
- (6) A Commercial Lighting Calculation Tool output report, produced at the time the activity is undertaken.
- (7) All evidence requirements specified by ESCOSA including those required by ESCOSA REES Bulletin No. 20 'REES Commercial Lighting Activities' or any relevant equivalent successor REPS bulletin.
- (8) Proof that all removed lighting equipment (including lamps and control gear) has been properly decommissioned including proof of correct recycling or disposal.
- (9) For linear LED tubes installed without removal of legacy ballasts and/or capacitors, evidence of the true power factor measurement and assessment approach used, and the result of the measurement made.
- (10) Where linear fluorescent luminaires are modified to accept linear LED tubes, written evidence that the recipient has received, and acknowledged receipt of, written information that the modification work will likely void the original luminaire manufacturer's warranty.
- (11) Evidence that each space, after implementation of the Lighting Upgrade achieves:
 - the relevant requirements of AS/NZS 1680 (Interior and workplace lighting).
 - the requirements of the NCC 2022 Volume One Part F6 (Light and ventilation) F6D5 (Artificial lighting).
 - an Illumination Power Density that equals or is less than the maximum Illumination Power Density for each space, as defined in Part J7 (Artificial lighting and power) of the NCC 2022 Volume One.

Additional requirements where recipient of the activity is a small energy consuming customer:

- (12) Evidence that the recipient has received, and acknowledges receipt of, written information on:
 - (a) the details of the new lighting equipment, including colour temperature, colour rendering and illumination levels, and
 - (b) the steps the recipient can take should the new lighting equipment be sub-optimal or unsatisfactory.

Additional requirements where recipient of the activity is a large energy consuming customer:

- (13) A valid tax invoice, clearly showing the completion date, the address, the name and contact details of the person billed for the installation, and the amount charged for the installation.

7. NORMALISED REPS GIGAJOULES

The normalised energy saving from undertaking this Activity is equal to:

Normalised REPS Gigajoules = output from the Commercial Lighting Calculation Tool as expressed in 'saved MWh' x 3.6 x Productivity Factor (up to a maximum of 20,000 GJ).

Where the productivity Factor = **1.207**

With the exception of lamp-only replacements of fluorescent tubes with LED tube products, REPS gigajoules for this Activity will be calculated using the deemed energy savings method under clause 9.4 of the *Energy Savings Scheme Rule of 2009*.

Calculations will use the factors and values from Schedule A – Default Factors and Classifications of the *Energy Savings Scheme Rule of 2009*.

For lamp-only replacements of fluorescent tubes with LED tube products, REPS gigajoules will be calculated using the Commercial Lighting Calculation Tool using the lighting category ‘LED Lamp Only 240V – Self Ballasted’.

Where linear fluorescent luminaires are modified to accept linear LED tubes, REPS gigajoules will be calculated using the Commercial Lighting Calculation Tool using the lighting category ‘Modified Luminaire (LED Linear Lamp)’.

8. GUIDANCE NOTES

This Activity references the commercial lighting method and Accepted Products under the NSW Energy Savings Scheme (ESS). The ESS commercial lighting method ceases on 31 March 2026. For the purposes of section 4(2) of this Activity, lighting products that were Accepted Products under the ESS on or before 31 March 2026 will be taken to be Accepted Products after 31 March 2026.

Commercial lighting products under the ESS include products of a class listed in the following:

- *Energy Savings Scheme Rule of 2009* – Schedule A – Table A9.1 ‘Standard Equipment Classes for Lighting Upgrades’;
- *Energy Savings Scheme Rule of 2009* – Schedule A – Table A9.3 ‘Other Equipment Classes for Lighting Upgrades’; and,
- IPART Public List of Accepted Products, available at:

<https://www.energysustainabilityschemes.nsw.gov.au/accepted-product-list>

The ESS Calculation Tool is available at:

<https://www.energysustainabilityschemes.nsw.gov.au/ess/documents/tool/commercial-lighting-calculation-tool>

The Victorian Energy Upgrades Program Product Register is available at:

<https://veu.esc.vic.gov.au/vpr/s/public-registry>

Except as listed below, a reference to a standard, code or legislative instrument is a reference to the version of the standard, code or legislative instrument in force at the time the activity is undertaken, including as amended or replaced.

- The *Energy Savings Scheme Rule of 2009* (effective 12 September 2025).