

Ausgrid's Policy on Public Lighting Minor Capital Works

(as per the requirements in the NSW Public Lighting Code June 2006)

July 2011



SCOPE OF THIS DOCUMENT

This publication outlines the Ausgrid Policy on Public Lighting Minor Capital Projects as per NSW Public Lighting Code requirements.

WARNING

It is the responsibility of the user of this document to ensure that only the current version is being used. Ausgrid may amend this document at any time.

DOCUMENT & AMENDMENT HISTORY

Issue No.	Date	Approved by	Summary of Changes
1.0	July 2010	M - SL	Initial Issue
1.1	May 2011	M - SL	Update to Ausgrid brand.
1.2	July 2011	M – SL	Minor changes including charges for new financial year 2012

Published and printed by Ausgrid.

Copyright ©, Ausgrid.

This document can be freely downloaded from www.ausgrid.com.au

This publication may only be reproduced with the permission of Ausgrid.

All correspondence should be directed to:

Manager Street Lighting
Ausgrid
GPO Box 4009
SYDNEY NSW 2001

For enquiries

Email Address: Publiclighting@ausgrid.com.au

Phone Number: (02) 8001 3480

Ausgrid's Policy on Public Lighting "Minor Capital" Projects

Contents

1	OBJECTIVE.....	4
2	SCOPE.....	4
3	REQUIREMENTS.....	4
	3.1 Process Requirements.....	4
	3.2 Regulatory and other relevant Standards Requirements	4
4	PUBLIC LIGHTING MINOR CAPITAL WORKS POLICY	5
5	PLANNING PUBLIC LIGHTING MINOR CAPITAL WORKS.....	6
	5.1 Public Lighting Customer Obligations	6
	5.2 Ausgrid's Obligations	7
6	RESPONSIBILITY AND ACCOUNTABILITY	8
7	REFERENCES	9
	7.1 Forms.....	9
	7.2 Standards & Guidance Material	9
8	GLOSSARY	9
9	APPENDIX - A - OVERVIEW OF PROCESS FOR PUBLIC LIGHTING MINOR CAPITAL PROJECTS.....	10
10	APPENDIX - B- APPLICATION FORM FOR PUBLIC LIGHTING DESIGN FOR CUSTOMER INITIATED PROJECTS (MINOR CAPITAL WORKS ONLY)	11
11	APPENDIX - C- APPROVAL FORM FOR PUBLIC LIGHTING CUSTOMER INITIATED PUBLIC LIGHTING PROJECTS (MINOR CAPITAL WORKS ONLY).....	15

1 Objective

This policy establishes the framework as defined by the NSW Public Lighting Code set by the NSW Government's Department of Water & Energy; now known as Department of Trade and Investment, Regional Infrastructure and Services, Division of Resources and Energy. This framework is to assist Public Lighting Customers to scope minor capital projects for public lighting and consciously make a decision about whether or not to comply with AS 1158 and enable Ausgrid to deliver those projects.

2 Scope

This policy is applicable to the provision by Ausgrid of minor capital works to its Public Lighting Customers (as those terms are defined in the NSW Public Lighting Code 2006 (**Code**)). All other requests for capital projects beyond the Code criteria are excluded from this framework but may be negotiated on a case by case basis. Refer to Section 4 for criteria, inclusions and exclusions.

3 Requirements

3.1 Process Requirements

This Policy is structured to integrate Public Lighting Customer requests with Ausgrid obligations as indicated in Ausgrid's Public Lighting Management Plan and as per our regulatory requirements for minor capital projects under the Code. Public Lighting Customers' conformance to internal processes will assist them in evaluating projects, levels of compliance and improve lighting standards for the benefit of the community at large. This will also assist Ausgrid personnel to comply with regulatory requirements and provide services to its public lighting customers.

3.2 Regulatory and other relevant Standards Requirements



Ausgrid has various legal obligations as an employer, controller, electrical designer and supplier of work premises, plant and / or substances.

Regulatory requirements and relevant standards and policies may include, but are not limited to the following:

- Network Standards - NS119
- NSW Public Lighting Code 2006.
- Relevant Parts of Australian Standard - AS/NZS 1158 series on Road Lighting.
- NSW Service and Installation Rules
- Australian Standard AS/NZS 3000:2000 – Electrical Installations known as Australian/New Zealand Wiring Rules.

4 Public Lighting Minor Capital Works Policy

Ausgrid's public lighting minor capital projects include the following criteria (as per the requirements in the Code):

1. Replacement of lighting on existing public lighting installations on Ausgrid distribution/network poles where Ausgrid has funded the initial installation.
2. New installations of brackets, luminaires and lamps on Ausgrid's distribution/network poles.
3. Only distribution poles supplied off overhead mains where there is existing low voltage wiring will be considered.
4. Specification and installation of Ausgrid's range of Standard Luminaires as per relevant Network standards.

Further Inclusions although not required by the Code

Please note for all of the above types of projects a limitation is set. The NSW Public Lighting Code defines minor capital works as installations of up to a maximum of seven luminaires only. Ausgrid will include the associated brackets as well. The installation of these associated brackets will be completed within the timeframe set by the Code. Projects cannot be broken into separate project requests to fulfil the above criteria.

Ausgrid is also willing to oblige when there is a requirement for additional poles to meet the required compliance level of the Australian Standards of Road Lighting, although this is not a requirement in the Code. An addition of up to two dedicated poles with overheard connection only will be considered as part of these projects to enable councils to achieve the necessary compliance level, but these projects will not be subject to the timeframes set by the Code.

Public lighting minor capital projects exclude the following:

1. Replacement or new installations of brackets, luminaires and lamps greater than seven on Ausgrid distribution/network poles where Ausgrid has funded the initial installation.
2. Replacement or new installations of brackets, luminaires, lamps and connections where a third party other than Ausgrid, has funded the initial installation.
3. Distribution poles and steel standards (poles) supplied off underground mains will not be considered under this framework.
4. Non Standard Luminaires will not be accepted.

If projects require more than two additional dedicated pole(s) then these will have to be funded by the customer and is deemed as a contestable project and is excluded from this framework. Please contact Ausgrid's contestable team to assist in the delivery of those projects.

5 Planning Public Lighting Minor Capital Works

5.1 Public Lighting Customer Obligations

There are two aspects of design services for public lighting; Illumination Design and Electrical Connection Design. Illumination design sets out a design brief of the site plans, lighting scheme performance and any other special equipment requirements (e.g. aeroscreens etc) based on the minimum technical information provided by public lighting customers. On completion of the illumination design brief, the electrical connection design is developed by the Distribution Network Service Provider. Electrical connection design cannot be developed unless the illumination design is complete and agreed upon by the public lighting customer.

Ausgrid can provide both these design services for public lighting customers for minor capital works projects. However illumination design is not a required service, and does not fall within the contestable framework but instead is a service that is subject to the open market. Any lighting consultant can provide illumination designs for a competitive price. Ausgrid's ability to undertake illumination design services is based on availability of resources in each of the regions, at the time of customer request. However, Ausgrid will always provide electrical design services for all minor capital projects.

Illumination design

The key customer input to these projects is illumination design specifications or requirements before the electrical connection design services can be done. Public lighting customers are urged to assess lighting requirements in view of the Australia Standard for Road Lighting (AS 1158) for Category "P" and Category "V" lights, and to identify the compliance level sought in their Application.

The Application Form AUSPL MCW F01 gives customers 3 options, which are discussed below.

Public lighting customers should choose option 1 when they have decided not to obtain an illumination design assessment when requesting a minor alteration or replacement, or if they are aware that compliance with AS 1158 will not be achieved. When Option 1 is chosen, Ausgrid is not liable for failure to assess illumination design or for any non compliance with AS 1158.

Where public lighting customers choose Option 2, Ausgrid may be able to provide an illumination design for minor capital projects based on availability of resources, when requested by the public lighting customer. Public lighting customers will be advised if Ausgrid is unable to do so, on receipt of the form and after determining the extent of work proposed. There will be a fee and this will have to be paid upfront before work commences. (Refer to Appendix Application Form AUSPL - MCW F01 for the relevant fees.) If the public lighting customer is aware that compliance cannot be achieved (for whatever reason) then it should select Option 1 and Ausgrid will not be requested to provide illumination design.

Option 3 applies when illumination design is provided, but not by Ausgrid. Illumination design specifications can be sourced from an open competitive market. Ausgrid is not responsible for compliance with AS 1158 when illumination design is provided by public lighting customers, lighting consultants, or other parties. However, it is still important that such designs can be applied to Ausgrid's existing network infrastructure, by ensuring that it complies with the NSW Service and Installation Rules and AS/NZS 3000:2000 – Electrical Installations, known as the Australian / New Zealand Wiring Rules and by providing relevant maps with the application form to demonstrate coherence to Ausgrid's network poles. Installation of new network poles or alteration of existing network poles cannot be negotiated. Therefore, there will be instances where compliance is unable to be achieved, and this must be stated in Application Form AUSPL-MCW F01 and in the compliance certificate. The compliance certificate is required where illumination design is conducted by a person other than Ausgrid.

Appropriate lighting category and subcategory for a particular road should be a matter for determination by, or in consultation with, the Roads and Traffic Authority.

Electrical connection design

Electrical connection designs are developed on the basis of the illumination design which aims to achieve the compliance levels requested by public lighting customers.

Forms

AUSPL – MCW F01 (Application Form)

When completing the application form, public lighting customers need to:

- decide which option applies to them.
- provide a clear and complete scope of works.
- identify the compliance level sought, selecting option 1 where compliance with AS 1158 will not be achieved, and indicating the appropriate compliance level sought where option 2 is used.
- (for Option 2) consult with Ausgrid regions if illumination design services can be provided at the commencement of customer's project evaluation.
- (for Option 3 only) attach a compliance certificate.

AUSPL – MCW F02 (Approval Form)

When considering the approval form, public lighting customers need to:

- review and approve the following to enable construction to commence:
 - Illumination Design and Electrical Connection Design developed by Ausgrid;
 - Residual value or the stranded costs of the public lighting assets being removed as appropriate;
 - Ongoing capital and maintenance charges for the new assets being either replaced or added to their existing public lighting accounts; and
- sign the approval, acknowledgement and declaration.

5.2 Ausgrid's Obligations

Once the illumination design Application Form has been received Ausgrid may need to seek clarifications with the public lighting customer based on the information provided. Application Forms may have to be resubmitted if the information provided in the original form is inadequate, if the scope of work varies when further clarifications are made, or if the Customer decides not to seek compliance with AS1158. The Start Constraint date will be the date when Ausgrid receives the last of the final form of application and payment in order for design services to proceed.

Ausgrid must develop illumination design on the basis of Form AUSPL-MCW F01 (and any further clarifications).

If Ausgrid becomes aware of any issues that may go to non-compliance with AS 1158, including design inadequacies, it must communicate these to the customer as appropriate in the circumstances so that the customer becomes aware of them and can make its own decisions about what to do. Once Ausgrid has communicated an issue, it has no further responsibility.

Ausgrid must provide the illumination design and electrical connection design package to the customer together with Form AUSPL – MCW F02 for the customer's approval.

Electrical Connection Design

Ausgrid will commence electrical connection design services after receipt of the approved application form (AUSPL - MCW F01) from the Public Lighting Customer and will ensure the following:

- Electrical connection design is developed on the basis of the approved Illumination Design Form AUSPL - MCW F01.
- Residual value or the stranded costs of the public lighting assets being removed is charged as per the AER Determination. It is a requirement under the determination that when assets are removed and/or replaced at the request of the customer then a residual cost is to be paid upfront. Public lighting customers must review and approve the residual costs as stated in the Approval Form AUSPL-MCW F02. Ausgrid will only charge the residual charge as per the AER Determination and these costs will be billed at the end of each financial year.

Ongoing capital and maintenance charges for the new assets being either replaced or added to the existing public lighting account(s) are charged as per the AER Determination. Ausgrid must endeavour to complete projects within the timeframes required by the NSW Public Lighting Code 2006.

On occasion delays can occur due to non availability of components chosen or other connection issues. Where this occurs, Ausgrid will notify the Customer of the expected delay and explain the reason for the delay.

6 Responsibility and Accountability

Ausgrid is responsible for:

- providing the illumination design services and achieving the compliance levels requested by a customer;
- notifying public lighting customers of any issues that go to non-compliance, including design inadequacies, as these arise;
- electrical connection design;
- timely completion of projects;
- maintaining inventory updates; and
- notifying public lighting customers of completion of work.

Public lighting customers are responsible for:

- public lighting illumination design (it is the customer's responsibility to decide what lighting is required for public roads and other public areas);
- instructing Ausgrid to provide design services (it is the customer's responsibility to provide clear instructions to Ausgrid about what lighting design and compliance level is required);
- public lighting levels (it is the customer's responsibility to ensure that appropriate lighting levels are determined in consultation with the road and traffic authority concerned); and
- actioning (or deciding not to action) any issues brought to its attention, and also addressing issues such as obstructions by tree branches and other forms of vegetation.
- compliance with AS 1158 (the customer is responsible for the illumination design being fully compliant with Australian Standard AS/NZ 1158 series).
- Review and approve the residual costs as per the Approval Form AUSPL-MCW F02.
- Review Public Lighting Price List for the current financial year on Ausgrid's website to determine annual charges for new street lighting assets and determine if feasible to proceed prior to proposing project(s).

7 References

7.1 Forms

AUSPL - MCW F01 - Application for Public Lighting Minor Capital Work/Projects.

AUSPL - MCW F02 – Approval form for Public Lighting Customer Initiated Public Lighting Project

7.2 Standards & Guidance Material

- <http://www.ausgrid.com.au/Common/Our-network/Standards-and-Guidelines/Network-standards.aspx>
- <http://www.ausgrid.com.au/Common/Our-network/Electricity-supply/Network-prices.aspx>
- <http://www.industry.nsw.gov.au/energy>
- <http://www.saiglobal.com/Information/Standards/>

8 Glossary

AS 1158 means the Australian Standard for Road Lighting AS/NZS 1158 series.

Code - NSW Public Lighting Code 2006.

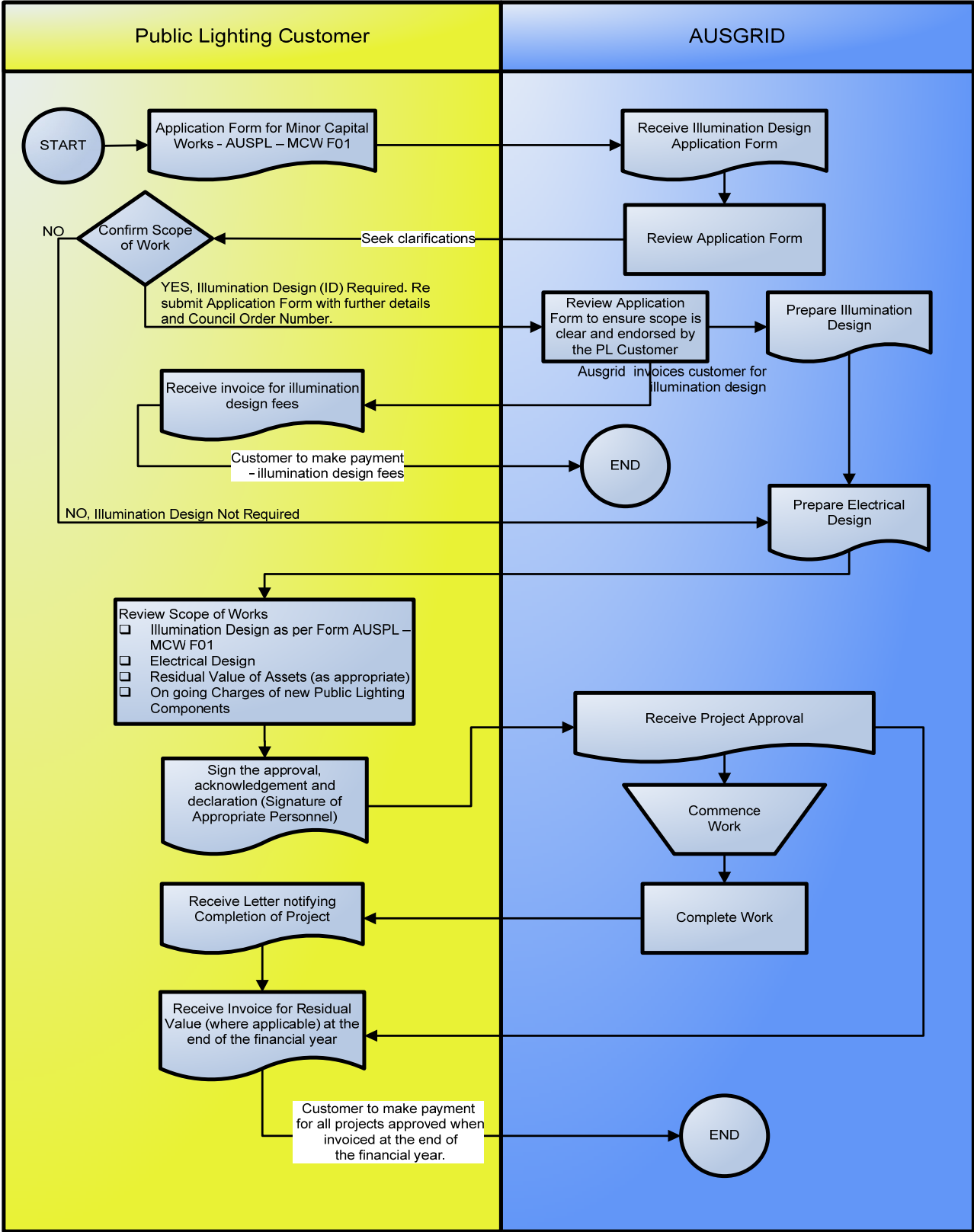
Distribution Network Service Provider - has the meaning given to that term in the *Electricity Supply Act 1995*.

Minor Public Works means the minor capital works listed in clause 10.1 of the Code.

Public lighting customer - a Council (as defined by the *Local Government Act 1993*), or Local, State or Federal Government agency that has authority over areas with public lighting.

9 Appendix - A - Overview of Process for Public Lighting Minor Capital Projects

Overview - Public Lighting Minor Capital Works
Process as per the NSW Public Lighting Code



10 Appendix - B- Application Form for Public Lighting Design for Customer Initiated Projects (Minor Capital Works only)

See Page 12, 13 and 14

From:

**Application Form for Public Lighting
Design for Customer Initiated Projects
(Minor Capital Works)
AUSPL - MCW F01**



To: **Ausgrid**

Attention: _____ of: *Distribution Operations & Reliability* _____ Date: _____

Section 1 - Illumination Design

Public Lighting Customers are to determine whether Illumination Design is required before commencement of the project and to tick one of the following options:

Option 1

Illumination Design is not required. *This option is to be used for either removal of assets or for infill lighting or to modify existing lighting e.g. when like for like replacement is required and when the customer chooses not to have an assessment carried out to verify if this replacement will comply with the Australian Standard for Road Lighting AS/NZS 1158 series. This option is also appropriate when the Customer is aware that compliance with AS/NZS 1158 series will not be achieved (for whatever reason). Acceptance of the choice of luminaire from Ausgrid's Standard List is subject to factors such as current pole strength etc. This option excludes pedestrian crossings, roundabouts, traffic route lighting (refer to AS/NZS 1158 series). Please note that Ausgrid is not responsible for non compliance against Australian Standards if this option is chosen.*

Complete Sections 2, 3, 4 and 7.

Option 2

Yes, Illumination Design is required from Ausgrid to comply with AS/NZS 1158 series. *Ausgrid's ability to undertake illumination design services is based on availability of resources in each of the regions, at the time of customer request. Ausgrid will assess the extent of work and resourcing capability and advice the public lighting customer. Tick the category of lighting required. If Customers choose not to achieve full compliance with AS/NZS 1158 series then they must choose Option 1.*

Category V Lighting for vehicular traffic

* V1 / V2 / V3 / V4 / V5 (circle sub- category)

OR

Category P Lighting for pedestrian traffic

* (P2 / P3 / P4 / P5) (circle sub- category)

Or

Category PX Lighting for pedestrian crossings

(PX1 / PX2 / PX3) (circle sub- category)

Illumination design fees: *These are to be paid upfront before work can commence. It is assumed when this option is chosen that customers approve these charges and Ausgrid will invoice the Customer when we receive your application form. For Councils, council order number will need to be provided on page 2 in Section 7. For all other public lighting customers payments need to be received. The fee will be reviewed every financial year.*

- \$296.02 (excl GST) for up to 3 luminaires and/or brackets
- \$592.04 (excl GST) for 4 to 7 luminaires and/or brackets. If compliance levels demand the need for one or two additional poles then the higher fee applies.

Complete Sections 2, 4, 6, and 7.

Option 3

Illumination Design has been developed by a third party other than Ausgrid. *Public Lighting Customers can choose to do the illumination design in-house or engage other lighting consultants. Please note that Ausgrid is not responsible for non compliance against Australian Standards if this option is chosen. The lighting designer must complete the attached compliance certificate confirming the level of compliance with AS/NZS 1158 series.*

Complete Sections 2, 4, 6 and 7 and attach a completed compliance certificate (our approved form is attached).

Section 2 – Address

Address where alterations or new lighting is requested: _____

Section 3 - Specifications when Option 1 is chosen

Public Lighting (PL) Assets being Removed

S. No	Pole Id	PL Asset/Component being removed against each Pole ID (luminaire - description)	PL Asset/Component being removed against each Pole ID (bracket - description)
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Section 3 continued.

New Public Lighting (PL) Assets

S. No	Pole Id	PL Asset/Component being installed against each Pole ID (luminaire - description)	Description of New Component for against each Pole ID (bracket - description)
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Section 4 - Other Comments

Other comments regarding Illumination Design that needs to be considered. Please specify clearly the boundaries by providing the pole IDs between which illumination design is required. Please list the documentation provided to Ausgrid along with this application form.

Section 5 - (for Ausgrid Use only)

Clarifications sought from Public Lighting Customer after receipt of this form to be noted and dated below.

Section 6 – Information about potential non-compliance

Please tell us anything you know about any reasons for possible non-compliance with AS/NZS 1158.0.2005.

Section 7 - Approval of authorised Public Lighting Customer Representative

Name (in block letters) _____

Title (in block letters): _____

Signature _____ Date: _____


Council Order Number (for Councils only): _____

Please note that if the Customer updates its specifications, Ausgrid may ask you to resubmit and re-sign this form to include those further details.

Nothing in this form excludes, restricts or modifies any condition, warranty, right or remedy which is conferred on the Customer by the Trade Practices Act 1974 (Cth) (or any state equivalent). Where Ausgrid breaches a condition or warranty which has been implied by the above Acts, its liability for breach will be limited to supplying the services again, or payment of the cost of having the services supplied again.

11 Appendix - C- Approval Form for Public Lighting Customer Initiated Public Lighting Projects (Minor Capital Works only)

See Page 16 and 17

From:	Approval Form for Public Lighting Customer Initiated Public Lighting Project (Minor Capital Works) AUSPL - MCW F02	 Ausgrid ABN 67505337385
--------------	---	---

(To be filled by Ausgrid staff)

Attention: _____ *For: Distribution Operations & Reliability* _____ Date: _____
 Form AUSPL MCW F01/Final Application Date: _____ Project Identification Number: _____
 Notification Number: _____ *(for Ausgrid only)* Work Order Number: _____ *(for Ausgrid only)*
 Project Name/Location _____

=====

To: **Customer** *(Ausgrid to check boxes)*

The attached Illumination Design and Electrical Connection Design package is based on the Customer's request.

(Where Option 1 applies) Only an Electrical Connection Design package is attached. The Customer has not requested Illumination Design to assess compliance with Australian Standard AS/NZS 1158 on Road Lighting (**AS/NZS 1158 series**). Ausgrid is not responsible for non compliance with that Standard.

(Where Option 2 applies) Illumination Design complies with AS/NZS 1158 series for:
 Category V Lighting (V1/V2/V3/V4/V5) *(circle sub- category)*.
 Category P Lighting for Pedestrian traffic (P2/P3/P4/P5) *(circle sub- category)*. Or
 Category PX Lighting for Pedestrian crossing (PX1/PX2/PX3) *(circle sub- category)*.
 The illumination design conforms to AS/NZS 1158 series.

AND

Although the illumination design conforms to AS/NZS 1158 series there is obstruction of light by trees/vegetation which reduces the illumination level. In the Australian Standard, trees/vegetation is not recognised as an illumination design non conformance. The Customer is advised to trim vegetation to improve lighting to the footpath and road, and to ensure practical compliance can be achieved.

Illumination Design does not comply with AS/NZS 1158 series for the reasons set out in the attached package.

(Where Option 3 applies) The Customer has taken responsibility to comply with AS/NZS 1158 series as per compliance certificate attached to the application form and declaration attached to this form.

Nothing in this form excludes, restricts or modifies any condition, warranty, right or remedy which is conferred on the Customer by the Trade Practices Act 1974 (Cth) (or any state equivalent). Where Ausgrid breaches a condition or warranty which has been implied by the above Acts, its liability for breach will be limited to supplying the services again, or payment of the cost of having the services supplied again.

