

# **Attachment 8.07**

# **Public lighting process improvements**

May 2014



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# **Document and Amendment History**

Issue No.	Date	Approved By	Summary of Changes
1.0	March 2014	Reg Team	Final
2.0	May 2014	John Bedding	Final with Formatting

# 1. Process Improvements

### 1.1 Introduction

This document describes the improvements that Ausgrid has implemented to public lighting processes during the 2009-14 regulatory control period. Ausgrid is committed to improving its policies, procedures and practices, to the benefit of all customers.

This document lists five substantive improvements that Ausgrid has undertaken, in an effort to streamline existing processes. Public lighting customers will be the principal beneficiaries of these initiatives.

# 1.2 Regulatory context

The process improvements described in this document have principally been driven by Ausgrid's desire to improve the levels of service that it provides to public lighting customers.

In some instances, these improvements have led to efficiencies in the manner in which Ausgrid provides these services and small, but worthwhile, reductions in the cost of providing public lighting services. Ausgrid has not sought to capture these cost reductions in the 2015-19 regulatory control period but has based its expenditure forecasts on efficient levels of cost taking into account these process improvements.

# 2. Google based map reporting system

### 2.1 Identifying the need

Ausgrid services a network of 250,000 street lights, on behalf of 41 local councils. Street lights are highly visible and an important factor in ensuring the safety and security of the community at night. In the case of street lighting, the end users are members of the community, rather than the councils and other organisations that procure public lighting services.

In the first six months of 2012, there were 11,366 requests from members of the community and public lighting customers for street light repairs. Ausgrid's engagement in the process of responding to these requests was limited. A person who reported a street light fault online received an automated email acknowledgement. However, no follow up contact was made when the fault was fixed, nor was an explanation provided if repairs would take an extended amount of time.

In addition to patrols on some major traffic routes, Ausgrid largely relies on the community and public lighting customers, such as councils, to report street light faults

# 2.2 Impact of the issue

The on-line street light reporting form was not very engaging. As a consequence, some requests did not have accurate descriptions of the location of the street light. Such faults are repaired during business hours and overhead or street light crews can take some time to locate the faulty street light.

Because there was no formal mechanism, people that reported street light faults mostly received no feedback when repairs were made. If a subsequent fault were to occur, they may believe that Ausgrid did not attend to their initial request.

In addition, the public from time to time report faults for street lights that Ausgrid is not responsible for, such as those on council or RTA assets.

### 2.3 Chosen solution

A Google Maps-based tool was implemented to report street light faults in March 2014. This system was developed to capture the potential of a more efficient and engaging way to allow the public to report street light faults. The map has an additional "layer" with the street lights for which Ausgrid has responsibility clearly identified on it. Users can navigate using familiar techniques to find the failed street light they wish to report. Street light faults that have already been reported are indicated in green on the Google interface, eliminating duplicate notifications.

To enable more effective response by maintenance crews, the system automatically raises a job request that has the asset identified on it.

At this stage, customers are unable to report street light faults for lights belonging to other organisations or outside our network area, however the advantages of more widespread adoption of this system will be promoted to other organisations.

This Google maps-based tool was implemented to improve the service for persons who wish to report an Ausgrid street light fault. This is an improved and more precise way for customers to report a street light fault. It is a new front-end service for the public and Ausgrid staff to report faults 24-hours a day.

A mobile phone application is planned for the new Google maps-based tool later this year.

In addition, a further enhancement is planned in the future (approximately 18 months time), upon completion of repairs, customers will receive an SMS notification advising that the repair job is complete.

# 3. Latitude / longitude

## 3.1 Identifying the need

Each street light that is owned or maintained by Ausgrid has GPS co-ordinates that are recorded in our asset management system and GIS database. These co-ordinates may be used by street light customers (mainly councils) to identify their street lights more accurately and confirm the accuracy of the information.

### 3.2 Impact of the issue

Formerly, street light customers would have to request GPS co-ordinates through Ausgrid's GIS department. This information was provided in map format. Separately, they would request their inventory, which included all street light components and street address information for each light. Customers had to merge these two different data sources together to undertake any data validation initiatives.

#### 3.3 Chosen solution

Since Ausgrid already holds the locational information for each street light in the asset management system, changes were implemented on December 2012, to facilitate sharing of the GPS co-ordinates of street lights more readily with customers. As part of the monthly extract of inventory data from the asset management system the longitude and latitude co-ordinates are now included in the inventory list along with component and address information for each street light that belongs to customers.

# 4. Combined Billing

# 4.1 Identifying the need

The AER Determination 2009-14 stipulated that Ausgrid's public lighting customers are to be charged two pricing components for all street light assets. These components cover the capital and maintenance charges in two pricing schedules, as follows:

- 1. A fixed capital charge, for all assets installed and constructed by Ausgrid before 1st July 2009; and
- 2. Maintenance charges for all assets maintained by Ausgrid, regardless of age, and capital charges for those assets constructed after 30th June 2009.

# 4.2 Impact of the issue

This method of billing changed the way in which all street lighting customers received their bills prior to 01 July 2009. Initially two bills were issued, one bill was issued for assets installed and constructed by Ausgrid before 1st July 2009 (capital) and a second bill for assets maintained by Ausgrid, regardless of age, and for capital charges for those assets constructed after 30th June 2009. This work around method has caused complaints and confusion amongst customers and internal staff.

#### 4.3 Chosen solution

In April 2014, the street light billing system was upgraded to simplify the invoices sent to public lighting customers. All charges now appear on the same invoice and the amount of manual intervention has been significantly reduced. The invoice now presents a more accurate description of the street light charges, and is differentiated from other Ausgrid charges.

The new arrangement also allows Ausgrid to have one source for the reporting of monthly Street lighting billing charges that captures the: pre-July 2009 capital charges; and post-July 2009 capital charges and all maintenance charges.

# 5. Electronic Billing

## 5.1 Identifying the need

As a responsible corporate citizen, Ausgrid is continually looking for ways to be more environmentally friendly. Councils received a large number of explanatory printed material that described their street lighting charges and supported their monthly street lighting bills. Ausgrid is committed to complying with environmental laws and minimising the environmental impact of our past, present and future activities. Ausgrid endeavours to incorporate environmental considerations into all relevant business activities.

## 5.2 Impact of the issue

The large volume of printed background material that was provided to Councils represented a waste of resources. A manual process was involved in printing the background material and matching it to Councils, bills. The time taken to receive bill, match backing sheets, and mail the pack to Councils could take up to two weeks to complete. This conflicted with Councils' requirement to receive their bills early in the month to arrange payment and avoid late payment fees.

# 5.3 Chosen solution

Councils were requested to provide or confirm e-mail addresses for monthly street lighting bills along with supporting documentation, to be e-mailed on a monthly basis. Commencing on February 2013, Councils have received their bills and supporting documents electronically, earlier in the month. Background information can be analysed mare readily in electronic format or printed at Council offices if required.

All billing documents can now stored by both Ausgrid and Councils electronically in properly managed IT solutions and accessed when required.

# 6. Effective date per component

# 6.1 Identifying the need

Each component on a street light quite often can have a different date on which it was installed. This is for a variety of reasons such as a replacement of the lamp, upgrade of the luminaire, a bracket change to reposition the light, or a new pole installed. Usually, at the time of such repair or rearrangement, components that are still working are re-used as part of the modified installation.

### 6.2 Impact of the issue

The component install date is referred to as the effective date. Depending on this effective date will determine which billing category they fall into, either the pre-July 2009 capital recovery model or the post-July 2009 annuity model. Customers wish to see this effective date in an effort to reconcile their charges.

### 6.3 Chosen solution

Ausgrid has required the effective date for billing accuracy; therefore it is now stored on the street light component in our asset management system. As part of the monthly extract of inventory data, the effective date for each component is now included in the inventory list that can be sent to public lighting customers upon request. These changes were implemented on December 2012 to provide our customers with more information about the street lights in their area. This information assist customers on determining when an asset was installed and which billing period the assets are charged.