Response to the Australian Energy Regulator on the Approach to the Regulation of Public Lighting

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1 Executive Summary

We appreciate the opportunity to engage early with the AER on matters relevant to the framework and approach for public lighting services[1].

We note the AER has included three options:

1. continuing the present approach,
2. a modification of the present approach and,
3. a cost building block approach which is similar in principle with distribution services.

An underlying theme of the AER's discussion paper is how the regulatory regime would allow competition to emerge in the provision of public lighting. In our response, we describe the current level of competition via contestable services and private installations. It is Ausgrid view that adopting either of the proposed approaches will have a limited impact to the level of competition present in the provision of public lighting.

Ausgrid also recommends that public lighting should remain classified as an alternative control service. This decision is based on the similarities of the proposed approaches with distribution services (classified as a standard control service) and the absence of effective competition in the provision of public lighting. Ausgrid is hopeful that a return to a more light handed interpretation of alternative control services is adopted by the AER.

Our response paper highlights the importance of the AER establishing a regulatory approach which correctly calculates the revenue required (i.e the efficient costs). There is an important distinction between this and the price mechanisms through which revenue is recovered. This paper also restates the efficient pricing principles described in the NER for distribution services and their relevance as criteria in assessing the future treatment of public lighting. Specifically, a building block approach to public lighting aligns with these pricing principles by:

- reducing complexity for both customers and providers,
- retaining cost reflectivity and,
- not creating barriers to competition.

These aspects, coupled with the fact that a building block approach is best suited to calculating the revenue required leads Ausgrid to recommend a building block approach should be adopted for the 2014-19 regulatory period.

[1] "Discussion Paper – Matters relevant to the framework and approach NSW DNSPs 2014-19 – Public Lighting Services", Apr 2012, AER

2 Treatment of public lighting in the current period

Our advice from our customers[2] is that the current regulatory treatment of public lighting is both overly complex and costly to administer. It requires bespoke models to set the price path for the regulatory period. A disproportionate amount of effort is required to establish a modeling approach and verify the modeling outputs. Furthermore 'business as usual' billing operations are cumbersome and resource intensive.

2.1 Customers' Experience with the Current Approach

Question 1

A. What has been the experience for customers under the current regulatory approach to public lighting? For example, do the current arrangements result in pricing that is too complex or lacking in transparency?

Since the beginning of the 2009-14 regulatory period Ausgrid has received ongoing queries regarding public lighting bills. These complaints stem from two intertwined issues with the current regulatory approach. Specifically:

- Bills are not transparent, as cost breakdowns are not available for pre 2009 assets (and it would be inordinately costly for Ausgrid to provide these with the present billing applications); and
- The mechanisms (regulatory approach) to calculate the bills are overly complex and do not allow customers to easily understand their charges.

Up until April 2012, there have been more than 110 instances of written correspondence recorded from 32 councils and 20 smaller customers requesting an explanation of their bill[3]. This is approximately half of the public lighting customers. In addition, many public lighting customers have made multiple phone queries to the public lighting team (via the Ausgrid contact centre) asking for an explanation of their bill.

Approximately one third of these queries relate to a perceived 'double billing'. This confusion is due to the requirement for two separate bills for the Pre 30th June 2009 assets (a fixed charge) and the post 30th June 2009 assets (a fixed price). Furthermore, if debtor management is required to assist in recovering outstanding bills, they also find themselves grappling to explain the reasons behind these separate charges that are a characteristic of the existing arrangement.

Since it is not possible to provide a detailed breakdown of the Pre 30 June 2009 assets, the difficulty in satisfactorily explaining a customer's complex bill is compounded.

2.2 Service Classification

The current classification of public lighting services as alternative control services arose due to transitional Rules in force at the time of the AER's 2009 determination. The alternative control services classification was chosen as it was similar to a lighted handed approach that had been applied in former years by IPART.

Question 1

B. Should public lighting in NSW continue to be regulated by the AER as an alternative control service or is there merit in classifying the service as a negotiated service or an unclassified (unregulated) service?

Ausgrid accepts that the classification of public lighting as a negotiated or unregulated service would depend upon the existence of effective competition in the provision of the elements of this service.

Some aspects of public lighting are subject to competition in Ausgrid's area. For example:

- Within the Sydney area, the majority of bulk lamp replacements are outsourced by Ausgrid, and therefore already subject to competitive tendering arrangements; and
- Purchase of public lighting equipment by competitive tender
- In new subdivisions customers are responsible for arranging public lighting services[4]

[2] Ausgrid is also actively consulting with SSROC who acts on behalf of a number of public lighting customers.

[3] Ausgrid is prepared to provide examples, with the customers permission, of the written customer enquiries to the AER on a confidential basis.

[4] The number of new public lighting installations, where customers have chosen an alternative provider, has increased slightly in recent years, to 10%.

Therefore, opportunities exist for customers to negotiate away from the standard public lighting service through contestable arrangements. Given the complexity of the regulatory arrangements implicit in the current regime and the complex interdependency between the service provided and the assets used to provide the service, we would not at this stage recommend a piece-meal approach to extracting parts of the service out for separate control.

In the future we would like to explore arrangements which would allow the DNSP and the customer to negotiate the public lighting service outside the complex regulatory arrangements. However, we would prefer to ensure the standard regulatory arrangements are improved first. Ausgrid strongly advocates a return to the original intent of this form of classification of services – that is, a lighter-handed form of regulation for the alternative control service than that applied to standard control services. The existing public lighting regulatory and pricing arrangements do not fit that description. They are inordinately complex and resource intensive and in urgent need of overhaul.

2.3 Competition in the Current Treatment of Public Lighting

At present, there is provision for contestability in the provision of public lighting services enshrined in the pricing arrangements. In practice, this means the following:

- A customer can privately arrange and fund public lighting, with the only interface to the DNSP being the metering point. In this case the customer is only charged for energy and network service only;
- A customer can elect to engage an ASP (Accredited Service Provider) to carry out the capital work of installing public lights. The assets installed must be on Ausgrid's approved list[5], to enable Ausgrid to maintain them; and
- Ausgrid may undertake the public lighting installation and provide ongoing maintenance.

A contestability framework exists in NSW which governs the process to classify and carry out contestable work.

With the above in mind, it can be seen there is already a level of competition and this has been facilitated by the current arrangements. This competition allows customers to bypass part, or all of the regulated public lighting regime. This is not expected to change with the specific approach, assuming that it correctly recovers efficient costs over the service life of the assets.

As mentioned, competition also exists in regard to the provision of maintenance services. For customers who are billed a maintenance charge, Ausgrid, on behalf of the customers, initiates a competitive tender process to obtain the most cost efficient prices for maintenance services such as bulk lamp replacement.

Ausgrid believes none of the proposed methods (the AER's, Endeavour's or Ausgrid's) would significantly enhance competition, when compared with the existing arrangements. However they do not suppress competition either. We expect that competition is only likely to be promoted when the provision of the service is; firstly, cost reflective and secondly, the regulatory control arrangements are less intrusive.

Question 1

C. Has the current approach resulted in greater (or less) competition in the construction or provision of public lighting services?

Competition in public lighting has remained largely static for the capital components. Within Ausgrid's network area the proportion of rate 1 (installed by Ausgrid) to rate 2 (installed by an ASP) has increased by less than 1% from 2010 to 2012. Rate 3 assets represents only 2.3% of the total asset count, but has also increased by 2% from 2010 to 2012. It should be noted that as pole rental and pole maintenance is not considered in the post 2009 annuity charges, they are below cost reflective prices.

On balance, public lighting lends itself to treatment as a natural monopoly due to long asset lives and similarities with the DNSP primary functions in the provision of standard control services. However, to the extent that the price for the service is competitively set, there are relatively low barriers to entry for alternative maintenance providers and there is the ability for customers to choose entirely private public lighting providers.

Pro-active investment and pricing strategies by DNSPs are not supported by current regulatory and pricing approaches. These are both reliant upon a fixed schedule of prices that is established at the time of the determination. New technology (such as LEDs) that may emerge during the regulatory control period is not readily incorporated within these pricing arrangements. Whilst the emergence of new technology may create an advantage for a private provider by being able to bypass older lamps, it would be far preferable to introduce a more flexible pricing arrangement that does not disadvantage DNSPs.

[5] http://www.ausgrid.com.au/Common/Our-network/Electricity-supply/~/media/Files/Network/Electricity%20Supply/Network%20Pricing/AusgridPublicLightingPriceList201112_Final.ashx,
- This list is updated to reflect the inclusion of new components

For this reason, Ausgrid has advocated the use of a Weighted Average Price Cap (WAPC) form of price control for public lighting services. The existing provisions for introducing new tariffs for standard control services provide the model to permit the introduction of new public lighting services.

3 Future Treatment of public lighting

3.1 Forecasting the required revenue

Two issues which must be considered in any proposed treatment of public lighting is the calculation of the revenue required (efficient costs) and the customer impacts.

Ausgrid considers the pricing principles described in the National Electricity Rules (NER) for distribution services highly relevant in comparing proposed treatment arrangements. These can be paraphrased as:

- The revenue required must lie between a lower bound representing the avoidable cost of not serving customers and an upper bound representing the stand alone cost of providing the service;
- The tariff for each service must take into account the long run marginal cost of providing the service;
- Transaction costs should be minimised; and
- Tariffs should ensure the recovery of expected revenue with minimal distortion of consumption.

With the above in mind, we can state the following desirable aspects of an approach to public lighting:

- Economic efficiency is obtained by correctly allocating costs to the customers using the service;
- Pricing should encourage and adapt innovation and productivity leading to efficient use of resources;
- Pricing should be equitable to all customers over time; and
- To the extent possible, prices need to be stable, simple and transparent.

Ausgrid considers the present number of separate prices unacceptable and strongly opposes any approach that would increase the number of price lists or the number of pricing elements.

3.2 Option 1 – Continuing with the current method

Question 2

The AER seeks comments regarding the use of Option 1. In particular:

A. What are the main advantages and disadvantages of this approach?

The current 2009-14 approach seeks to establish an additional asset class for assets installed during 2009-14. There would then be three pricing components relevant to the capital charge for public lighting assets held:

- Pre-2009, calculated using a roll forward financial valuation of all pre 2009 stock, adjusted for disposals;
- 2009-14, a continuation of the annuity to recover capital charge for assets installed in the 2009-14 period.
- 2014-19, calculated using a notional replacement value for new public lighting stock and providing an annuity charge based on this replacement value over a predetermined life.

Extending the current approach would move the treatment of public lighting further away from the desirable aspects of an approach to public lighting, namely;

- Prices are not established with regard to long run cost;
- Are inequitable, since prices can vary for assets providing the same service; and
- The pricing causes lumpy customer bills due to investment required to replace fully depreciated assets.

Furthermore this approach does not lead to a reduction in complexity or transparency, which Ausgrid considers paramount. It in fact generates an additional pricing component for each of the 100+ street light assets at each regulatory reset. There would thus be some 400 pricing components during the 2014-19 regulatory control period.

If the current approach continues at future regulatory resets, an additional partition of the asset base would be required at each reset, until such time as the pre-2009 assets are fully depreciated.

The pre-2009 assets in the roll-forward model will have a residual life of 11 years as at 2014. They will thus not be fully depreciated until 2025, so there will be a decreasing residual asset value associated with the pre-2009 assets until the 2024 regulatory reset. This implies that there will be an additional set of pricing components introduced for the 2014-19 and 2019-24 regulatory control periods, giving 5 partitions of the asset base, in total. This would involve approximately 600 pricing components, in total.

The AER's proposed approach is therefore clearly unsustainable, as it would lead to enormously complex pricing, billing and asset recording arrangements. The ensuing street light charges would also be nigh impossible to explain to, and be understood, by their customers.

It is appropriate in 2014 to set up a regime where at the next regulatory determination, unless there had been a fundamental change, the process may be readily replicated without the need for further fundamental change and dislocation.

3.3 Option 2 – Endeavour's proposal

Question 3

The AER seeks comments on Endeavour Energy's submission. In particular:

A. What are key advantages and disadvantages of the approach proposed by Endeavour Energy?

An advantage of the approach proposed by Endeavour, over that of the AER, is that it is capable of preserving the existing regime of two-part pricing for the large and expanding inventory of street light assets, rather than creating an additional suite of charges or price components. Whilst Endeavour has stated that its customers have not objected to the existing complex arrangements, Ausgrid's customers have clearly communicated their dissatisfaction with the complexity of the current approach[6].

It is not clear to us how the capital charge for post 2009 stock would be calculated, other than the capital charge was to be based on an annuity return. However, assuming the value of asset would involve merging or combining the roll-forward approach used for the assets constructed after 2009, it would create either:

- an averaged price signal; or
- additional pricing components (within a partitioned roll-forward model) for the assets installed post 2014.

Significant debate occurred in the last process around issues of valuation and the basis of valuation. These issues are core to the choice of control mechanism. We believe it is in the best interests of stakeholders to ensure these issues are explored as part of the framework and approach paper discussion.

Ausgrid believes that if it is appropriate to merge the pricing arrangements for 2009-14 and 2014-19, a simpler arrangement would be to merge the requirements of all three periods into a single model.

B. Would the averaging of capital costs used to calculate the annuity for assets constructed in the 10 year period 2009 to 2019 disadvantage third party providers of these assets?

It is clear that a key issue with this proposed approach is the determination of the asset value used to create a capital charge. It is not clear in Endevour's proposal, how the value of 2009-14 and 2014-19 will be established. However, we assume where assets are merged, prices would be based on an amalgam of forecast, current and historic costs which may reduce cost reflectivity.

The principle of Financial Capital Maintenance that is embodied in the Rules for the provision of distribution services also applies currently to public light assets and Ausgrid's roll-forward model would need to be adapted to include assets provided prior to the current period. This could be carried out by:

- Maintaining the existing pricing components for 2009-14 and creating a new set for the assets to be provided during the 2014-19 regulatory control period; or
- Adjusting the valuation of the 2009-14 assets and incorporating this to an averaged price for the 2014-19 period.

[6] It is also understood that Essential's customers are generally dissatisfied with the pricing arrangements, although they have in some cases been provided with detailed inventories of charges on a monthly basis.

The first of these approaches would increase the number of price components (including prices for the same assets provided in different regulatory periods) at each regulatory reset and would not represent a significant simplification of the AER's approach.

The second would result in the smearing of annuity costs. A principal reason for the adoption of the annuity model by the AER was that it could provide costs during the regulatory period that represented the provision of new assets, rather than being based on historic costs. Provided the principle of Financial Capital Maintenance is adhered to, this should yield a charge similar to the LRMC of street light services, for a service that is offered over a number of regulatory periods.

As with Ausgrid's proposal, the Endeavour proposal is not expected to materially disadvantage a third party provider of assets. An alternative service provider must also recover the capital and operating costs over the life of the assets, potentially, albeit with a shorter time horizon than might be envisaged by a utility. This should equate to the LRMC charges by the utility.

3.4 Option 3 – Ausgrid's proposal

Question 4

The AER seeks comments on Ausgrid's submission. In particular:

A. Would a simplified pricing structure such as this come at the expense of cost reflective prices?

Cost reflective pricing is not compromised with Ausgrid's proposed approach despite not having individual prices for individual assets. Elaborate pricing regimes that reflect asset costs at the time of their installation does not create efficient or competitive price signals and is not a feature of any other regulated services – e.g. telecoms, water, electricity, gas, transport. Cost reflectivity should reflect the service provision reasonably represented by averages of the cost of the service provided, and pools of assets, rather than each individual asset. Customers that receive electricity network service are charged a uniform price for the service they receive that depends only on their consumption of that service, not the age of the individual elements that constitute the supply connection.

Ausgrid believes it is appropriate to institute a reasonable level of averaging of costs of provision of similar services. A service may be provided by a variety of assets and it is appropriate for the associated costs to also be averaged.

The averaging of costs proposed by Ausgrid has been demonstrated to result in some differences in financial outcomes for most street light customers. These differences would even out with time, as those customers with high current charges arising from a relatively new suite of assets would receive a price based on the average age of the pool of assets. The only customers that would receive significant price changes (up or down) are expected to be those that are provided with service by a small number of assets of a specific type or whose inventory of assets greatly differs markedly in age from the average. With this in mind, Ausgrid is open to the discussion of transitional pricing arrangements for customers deemed to have unacceptable price impacts, provided that the efficient costs of service provision are fully recovered.

Ausgrid would reiterate the fact the overall revenue requirement would not change with the adoption of asset pools to calculate the service charge. Rather, the price changes would arise from the apportionment of those costs, in the transition to prices that truly reflect the long run costs of service provision.

Ausgrid's proposal would provide a standardised approach that matches the pricing to the services provided and provides similar levels of cost reflectivity to that currently applied to all other utility services, including those regulated by the AER.

B. Would this approach permit the entry of third party providers of public lighting services?

A public lighting customer, in selecting a public lighting service provider, would consider many factors. The main consideration would be the total cost of service provision. A rational customer would consider the total costs of service provision over a period commensurate with the life of the assets (say 20 years), but realistically this would be discounted and a time horizon of perhaps 5 to 10 years might be considered.

Ausgrid's approach, using the PTRM, would result in prices for public lighting services that recover the cost of the assets over their expected useful life. These prices should be comparable with those of a competitor that priced on a long-run basis. It is therefore not considered that the averaging of prices in the manner that Ausgrid proposes should be a barrier to the entry of third party providers of public lighting services.

4 Conclusion

Using the distribution pricing principles as a guideline, Ausgrid firmly believes that treatment of public lighting for 2014 onwards should comprise of a roll forward asset valuation approach to arrive at the revenue required (calculation of efficient costs), and a service based charge to recover this revenue. This conclusion has been reached with consideration to the reduction in complexity compared to alternative approaches and the more accurate calculation of the revenue required possible if Ausgrid's proposed approach is adopted.

Ausgrid also believes that the adoption of a WAPC form of price control provide the flexibility to permit DNSPs to respond to the new technologies that are expected to emerge in public lighting during the 2014-19 regulatory control period.