



EnergyAustralia™

EnergyAustralia's submission to

Independent Pricing and
Regulatory Tribunal

EnergyAustralia's
Revised Public Lighting
Pricing Proposal

June 2005

Energy

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EXECUTIVE SUMMARY

On 16 November 2004, EnergyAustralia submitted a proposal to the Independent Pricing and Regulatory Tribunal ("IPART") seeking approval of charges relating to the construction, maintenance and asset management components of EnergyAustralia's public lighting business. In its original submission, EnergyAustralia sought approval of prices that were sufficient to sustain the necessary investment in the public lighting system and to enable EnergyAustralia to achieve a commercial rate of return on its investment.

On 2 March 2005, IPART wrote to EnergyAustralia advising that it rejected EnergyAustralia's proposals. EnergyAustralia was required to submit alternate prices as the Tribunal considered that *"the customer impacts arising from EnergyAustralia's proposal are unreasonable"*; and *"possible inconsistency between EnergyAustralia's asset life / remaining asset life assumptions and its capital expenditure projections"*.

In this revised pricing proposal, EnergyAustralia develops a suite of revised prices that we believe will meet the Tribunal's "reasonable" criterion, and addresses the Tribunal's concerns regarding EnergyAustralia's public lighting capital expenditure projections.

IPART's new regulatory arrangements were designed to unwind the current situation that sees all electricity customers cross-subsidising the provision of streetlighting by councils. The new arrangements require street lighting to be treated as a stand-alone business and for local councils to pay the full cost of this service.

This change in regulatory treatment results in a required increase in public lighting revenues of \$5.7 million, which underpinned the 26 per cent initial price increase originally sought by EnergyAustralia. Unless the shortfall is reflected in prices, there would be a subsidy to streetlighting customers at the expense of EnergyAustralia and the taxpayers of NSW.

EnergyAustralia has developed a revised pricing proposal that, we believe, strikes a reasonable balance between minimising price rises for customers while at the same time not imposing an unacceptable level of regulatory risk on EnergyAustralia. Underpinning this revised pricing proposal is the firm belief that a regulatory framework should not institutionalise a loss of shareholder value, and as such this proposal is designed to be "NPV neutral".

Key features of EnergyAustralia's revised public lighting pricing proposal include:

- An initial average P_0 adjustment of CPI + 10% from 1 July 2005, followed by average price increases of CPI + 5% for the subsequent three years. This price path would resolve the transitional revenue shortfall over the current term of the Rule on excluded services.
- The public lighting price increases in the first year of the price this proposal result in price impacts for all Councils of less than 0.2% of total budget. On average, the per Council rate increase is about 1/10 of 1% of Council budget. On a per customer basis, all but two local Council areas see increases of less than \$3.00 per rateable property. EnergyAustralia believes that the impact on customers of this approach is not "unreasonable" to support continued investment in the public lighting service.

- To achieve this pricing outcome, EnergyAustralia has increased the period over which existing assets are recovered from 10 years to 16.2 years, which in turn lowers the return of capital component of the revenue requirement.
- As an ancillary concern, IPART noted the apparently incongruous profiles of depreciation (as used to determine return of capital) and capital expenditures, leading to a significant erosion of the public lighting asset base. This revised pricing proposal sets out the assumptions underpinning the depreciation profile and demonstrates that the original profile does closely align to the level of capital injection required to maintain a “steady state average of half their expected useful life”, as held in our original submission.
- Due to the delay in the introduction of the Public Lighting Code, and uncertainty as to the final form that the Code may take, EnergyAustralia’s revised pricing proposal excludes any incremental costs associated with its compliance. EnergyAustralia will assess the impact of the Code once it is finalised and will seek the recovery of any incremental compliance costs as required at that time.
- EnergyAustralia notes the Tribunal’s decision to not recognise the dedicated assets that were (erroneously) omitted from the regulatory asset base in the previous IPART Determination. It is disappointing that, in the context of a recent Australian Competition Tribunal review (*ACT review of ACCC decision re EAPL*), IPART has not accepted the inclusion of the dedicated assets, which are clearly required to operate the public lighting business (and which a hypothetical new entrant would face). EnergyAustralia will continue to advocate the inclusion of these assets at future pricing reviews.
- EnergyAustralia acknowledges that some of the concern expressed by councils with respect to our original proposal was as a result of the translation of the overall average price path to the individual council charges. EnergyAustralia notes that the current structure of public lighting charges is characterised by historical cross subsidies between councils as well as between individual unit charges. In order to move to a more equitable and efficient form of pricing (that signals the usage costs) the unwinding of these cross subsidies is required. EnergyAustralia’s original submission fully unwound the cross subsidies and we maintain that this is the economically efficient approach.

EnergyAustralia is not seeking to undertake any price rebalancing in the first year of the proposed price path. EnergyAustralia will continue to investigate options to improve the cost reflectivity of individual public lighting prices in the context of the flatter pricing trajectory forecast for the outer years of this proposal, and will work with the Tribunal secretariat to develop a manageable pricing transition at that time.

- In order for EnergyAustralia to move away from its original pricing proposal to a longer term transitional path, we seek formal commitment from IPART that the pricing trajectory will be recognised in future years, and that only deviations to the price path would be the subject of more detailed review (ie., in the case of the Public Lighting Code, increased service standards or other significant events).

1. INTRODUCTION

On 16 November 2004, EnergyAustralia submitted a proposal to the Independent Pricing and Regulatory Tribunal (“IPART”) seeking approval of charges relating to the construction, maintenance and asset management components of EnergyAustralia’s public lighting business. Together, these components are categorised as Street Lighting Use of System, or “SLUOS”, charges. In its submission, EnergyAustralia sought approval of prices that were sufficient to sustain the necessary investment in the public lighting system and to enable EnergyAustralia to achieve a commercial rate of return on its investment.

On 2 March 2005, IPART wrote to EnergyAustralia advising that it required EnergyAustralia to submit alternate prices based on the view that the requirements of Clause 2.3 of Rule 2004/1¹ had not been met. In effect, the areas where IPART considered that the requirements of Clause 2.3 had not been met were the following:

- The Tribunal stated that “*the customer impacts arising from EnergyAustralia’s proposal are unreasonable*”; and
- The Tribunal noted the “*possible inconsistency between EnergyAustralia’s asset life / remaining asset life assumptions and its capital expenditure projections*” and that “*EnergyAustralia should therefore further consider different depreciation projections in light of the [reduction in the asset base over the coming years given the forecast level of capex]*”.

In this submission, EnergyAustralia proposes alternate prices that it maintains are “reasonable” when due consideration is given to the pricing implications of changes in the regulatory treatment of public lighting. This change in regulatory treatment was responsible for the public lighting revenue shortfall underpinning the entire 26 per cent initial price increase. In dollar terms, unless this revenue shortfall is reflected in public lighting charges, this represents a \$5.7 million subsidy for public lighting customers at the expense of EnergyAustralia and the taxpayers of NSW. It is understandable that public lighting customers would want to preserve this subsidy and oppose EnergyAustralia’s initial pricing proposal that sought to address this revenue shortfall.

However, to address IPART’s concerns over the magnitude of the initial price increase (while at the same time preserving a framework that does not destroy shareholder value), EnergyAustralia has developed “alternate prices” that we believe represent a reasonable transition to address the impact on customers while at the same time maintaining an “NPV neutral” approach.

EnergyAustralia is also confident that it can sufficiently alleviate any possible concerns of IPART over the capital expenditure / depreciation profile underpinning the original proposal. This revised pricing proposal should further allay any concerns as the return of capital has been reduced in the earlier years to mitigate the impact of price increases on customers. As is demonstrated later in this proposal, this approach would result in a higher RAB (and therefore higher prices in the medium to long term) than would otherwise be the case.

¹ *Regulation of Excluded Distribution Services Rule 2004/1 – June 2004* as contained in the NSW Electricity Distribution Pricing 2004/05 to 2008/09 Final Determination (from page 95).

As per our original proposal, this revised proposal does not address the retail supply of electricity to public lighting installations, nor the services provided by the distribution network as a prescribed service under IPART's 2004 Determination.

1.1. HISTORICAL PRICING ARRANGEMENTS

1.1.1. IPART's 1999 Determination

In its 1999 determination, IPART bundled the public lighting operations into the Network business. As a result, the public lighting building block components were added to those of the network and included in the overall allowable revenues of distributors.

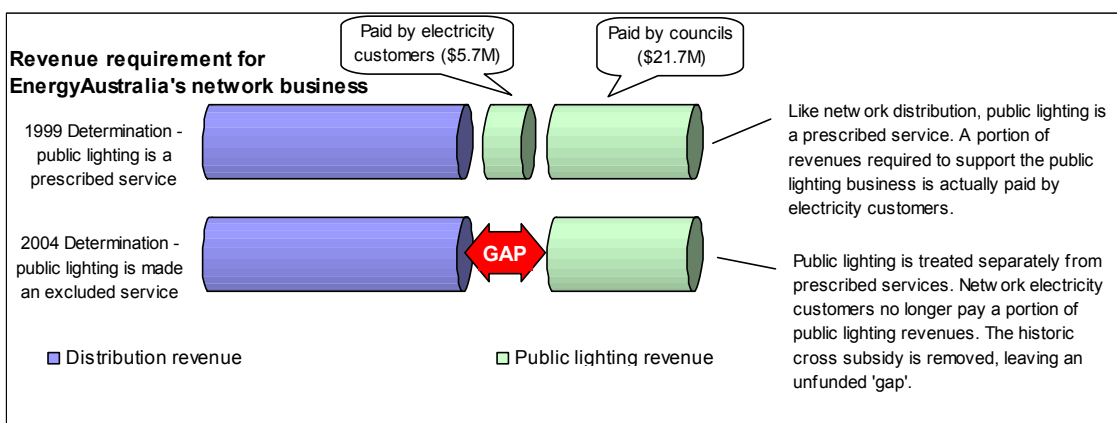
This determination went some way to rectifying the previous shortfalls in allowable revenues delivered under the MWh price cap determinations. However, actual revenues from public lighting customers still did not recover public lighting costs; the total Network allowable revenue included these amounts and therefore all allowable public lighting revenues were recovered (or were recoverable) from other Network customers. The shortfall in public lighting revenues was recovered from other Network customers.

1.1.2. IPART's 2004 Determination

IPART's 2004 Determination classified public lighting as an Excluded Service, and removed any revenues associated with public lighting – ie, IPART “excluded” the costs of public lighting in its Weighted Average Price Cap (WAPC) calculation for the prescribed distribution network.

As illustrated in Table 1.1, IPART's removal of the public lighting revenues from the distribution network revenues in the 2004 Determination would result in an overall revenue (as represented by the total public lighting costs recovered through DUOS charges and SLUOS charges) shortfall of \$5.7 million unless this shortfall is fully recovered by public lighting (only) charges.

Figure 1.1 – Summary of changes in public lighting costs and revenues



EnergyAustralia's original proposal advocated the adoption of a P_0 adjustment to maintain parity of public lighting costs and revenues.

It should be noted that public lighting revenues are relatively small when compared to the total distribution network revenue. However, the pricing impact of the difference between actual public lighting revenues and the revenue requirement (ie, the public lighting revenue “shortfall” that was previously recovered by network customers) is significant in percentage terms relative to the public lighting revenues. Where the revenue shortfall had an impact on overall distribution network prices of less than 1 percent, it has approximately a 26 percent impact on the required revenue from the public lighting service if recovered through a P_0 adjustment.

The difference between the 2004/05 public lighting revenue requirement as a prescribed distribution service and the current public lighting revenues (ie, the revenue “shortfall”) would occur unless there is a corresponding increase in the revenues from the public lighting (only) business. The magnitude of the subsidy has been calculated using the model prepared and populated by IPART during the 2004 distribution Determination and is set out in Table 1.1 below:

Table 1.1 – Calculation of public lighting revenue shortfall as per the IPART model

2004/05 public lighting status quo revenue requirement (\$000)	27,361 ²
2003/04 public lighting revenues	21,689 ³
Revenue shortfall caused by change in regulatory framework	5,672

EnergyAustralia maintains that it is incumbent on IPART to recognise the revenue shortfall created by its change in regulatory treatment of public lighting and to allow its recovery in future public lighting charges.

1.1.3. DEUS Public Lighting Code

As outlined in EnergyAustralia’s original submission, the NSW Department of Energy, Utilities and Sustainability (“DEUS”) is currently undertaking a consultation process towards finalising the NSW Public Lighting Code (the “Code”). This Code includes a number of minimum service standards, such as provisions requiring the DNSP to repair faulty lights within specified time frames. It is EnergyAustralia’s understanding that compliance with this Code may become a condition of its distribution licence.

Due to the delay in the implementation of the Code, EnergyAustralia’s revised pricing proposal excludes any incremental compliance costs associated with it. EnergyAustralia will reassess the impact of the Code once it has been finalised and will seek to recover any incremental compliance costs at that time.

Excluding any Code compliance costs at this time is consistent with the concerns outlined by IPART in its 2 March 2005 letter to EnergyAustralia relating to public lighting charges:

² Assuming 10 years remaining of a 20 year life.

³ It should be noted that EnergyAustralia did not implement a CPI price increase effective 1 July 2004. Therefore public lighting customers have indeed received a real price decrease.

“The Tribunal considers that it would not be appropriate to consider any price changes in relation to the introduction of the Code until the exact form of the Code and its obligations are finalised, and until the Code has been introduced.”

1.1.4. Dedicated public lighting assets

In its November 2004 submission, EnergyAustralia identified \$116 million in assets dedicated to the public lighting system that have historically been excluded from regulatory consideration and consequently earn zero return. These are assets that are in use and are required to provide the public lighting service.

EnergyAustralia maintains that it is entitled to earn a commercial return on this investment and to receive a return of the invested capital over a reasonable time horizon.

We note the recent Australian Competition Tribunal decision on the appeal of the ACCC’s decision on the Moomba to Sydney Pipeline, where the costs of a Hypothetical New Entrant - a similar argument to that outlined by EnergyAustralia in its original public lighting submission - were recognised in establishing the value of the asset base.⁴ It is concerning in this context that IPART has not accepted the inclusion of the dedicated assets, which are clearly required to operate the public lighting business (and which any new entrant would face).

EnergyAustralia is disappointed in IPART’s reluctance to recognise the value of these assets. However, due to the impact on pricing that this issue would have at the present time if combined with recovering the costs of the change in regulatory frameworks, this pricing proposal does not include costs relating to the inclusion of the (previously excluded) dedicated assets. EnergyAustralia will, however, seek to include these legacy dedicated assets during future reviews, using an appropriate transition path.

EnergyAustralia has included in this submission a price for new dedicated public lighting supports installed subsequent to the acceptance of these pricing proposals.

The costs and required revenues and average prices associated with EnergyAustralia’s revised public lighting pricing proposal are developed more fully in this submission.

⁴ See *Application by East Australian Pipeline Limited [2005] ACompT 1* (18 March 2005), <http://www.austlii.edu.au/au/cases/cth/ACompT/2005/1.html>

2. PUBLIC LIGHTING REVENUE REQUIREMENT

2.1. BUILDING BLOCK APPROACH

EnergyAustralia's revised pricing proposal report has been developed using a building block approach, as used in the IPART distribution network Determination. The building block approach calculates the overall public lighting revenue requirement in terms of:

- Asset related costs
 - a return on capital; and
 - a return of capital
- Operating and maintenance costs.

These are developed more fully below.

As previously provided to IPART in February 2005, EnergyAustralia also conducted a benchmarking exercise to compare its costs of providing public lighting services with those recently approved by the Essential Services Commission Victoria. EnergyAustralia compared its costs to those built up by the ESCV on a like-for-like basis. Adjusting for differences in the structure of public lighting prices to account for return and depreciation,⁵ EnergyAustralia's analysis indicates that the proposed public lighting prices would be found to be fair and reasonable according to the ESCV criteria.

2.2. ASSET RELATED COSTS

Consistent with the building block approach, asset-related costs include a return on and a return of invested capital, as discussed below.

2.2.1. Asset valuation methodology

EnergyAustralia considers that the change in regulatory framework presents an opportunity to revisit and revalidate the public lighting capital base. For the purpose of determining the target revenue requirement, assets have been valued using a Depreciated Optimised Replacement Cost methodology using actual replacement costs based on current supply contracts.

In preparing this asset valuation, EnergyAustralia has established a comprehensive, up-to-date inventory of public lighting assets, consisting of approximately 250,000 installations comprising luminaires, lamps, brackets, connections and supports.

Each asset has been valued independently, according to its replacement cost. It should be noted that each asset class (for example, luminaires) has multiple individual types of assets, all of which have been costed separately.

⁵ Victoria's public lighting prices only allow for a return on and return of capital invested since public lighting became an excluded service in 2001.

These assets are tracked by customer, such that an inventory of public lighting assets can be prepared for each Local Council. This inventory listing forms the basis of charges levied for public lighting services.

Using this 'bottom-up' approach to valuing EnergyAustralia's street lighting assets resulted in an opening asset base value of \$87M. EnergyAustralia believes this RAB should form a "line in the sand" for asset valuation moving forward.⁶

2.2.2. Return on Capital

Consistent with IPART's final Determination on the distribution network, EnergyAustralia has applied, for the purpose of these public lighting pricing proposals, a pre-tax real cost of capital of 7.0% to calculate a return on capital. This pricing report does not discuss the derivation or appropriateness of this cost of capital; readers are referred to EnergyAustralia's previous submissions on this topic as part of the consultation process in IPART's 2004 distribution Determination.

2.2.3. Return of Capital

In its response to EnergyAustralia's pricing proposal, IPART requested more information on the assumptions underpinning the calculation of "depreciation". It is important to distinguish between the terms "return of capital" and "depreciation" and the associated impact on this revised pricing proposal. It is possible (and in some cases desirable) to break the nexus between "depreciation" (or the technical remaining service life of existing assets) and "return of capital" (or the targeted return of invested capital).

In its 5 March 2004 submission to IPART on the distribution review, EnergyAustralia engaged NERA to prepare a report that critically reviewed this issue. In its report⁷, NERA stated:

An alternative that would also deliver [Financial Capital Maintenance] would be to adjust the calculation of building block 'depreciation' in the current regulatory period to be equal to the actual return of capital that would result in each year given the chosen revenue path. By aligning building block depreciation [with] the allowed price/revenue path there is never any expected NPV loss due to smoothing ... This also means that the standard approach to determining the roll forward of the asset base can be employed with the RAB being increased each year by the difference between prudent capital expenditure and decision depreciation/return of capital.

This would be a departure from the current approach to estimating building block return of capital on the basis of straight-line depreciation and average remaining asset lives (ARAL). However, this can be viewed as a beneficial change to IPART's regulatory framework as it would recognise that there are any number of profiles for the return of capital that are economically efficient and consistent with other objectives (such as protecting customers from large price shocks). Rather than an inevitably arbitrary 'depreciation' formula driving prices (or NPV losses suffered by businesses) an informed decision about revenue smoothing can be taken. This decision would then determine the 'depreciation' of the financial value of sunk investments.

⁶ Subject to the inclusion of the dedicated public lighting assets as discussed in section 1.1.4 of this submission.

⁷ "A Review of IPART's proposed 'straight-line-smoothing' methodology – A report for EnergyAustralia", Prepared by NERA, February 2004 and included as Attachment 2 to EnergyAustralia's 5 March 2004 submission to IPART on the Draft 2004 Distribution Determination. Pages 13-14, section 4.2, "Equate Building Block 'Depreciation' to Forecast Return of Capital".

NERA, however, went on to caution about the “over-use” of continually extending the return of capital and the impact it may have on investment:

If a regulator continuously constrains prices/revenues in a manner that causes the RAB to grow at ever increasing rates then there is the danger that the RAB will become a meaningless concept – as businesses may perceive a low probability that the regulator will ever allow it to be fully recovered from customers. Thus, it is important that inter period smoothing be just that and not simply pushing back the recovery of efficient unit costs which are not expected to fall.

However, it is precisely for this reason that IPART should commit to the [concept of] FCM methodology. By doing so it makes transparent the implications, both now and in the future, of any decisions to set revenues that are inconsistent with those implied by the 'building block' methodology. It also places a constraint on IPART whereby it is clear that lower prices now must mean higher than otherwise prices in future regulatory periods (or an explicit regulatory stranding of asset values) [emphasis added].

The distinction is important to note when considering IPART's concern over the apparently incongruous profiles of depreciation and capital expenditure in EnergyAustralia's original submission, and the subsequent expected erosion or 'run-down' of the public lighting asset base.

EnergyAustralia's original pricing proposal was based on the use of a 10 year remaining average life assumption for existing public lighting infrastructure. This remaining life was consistent with the remaining life reported to IPART as part of EnergyAustralia's audited regulatory financial accounts.

In order to derive a “reasonable” price path, while maintaining NPV neutrality, the period over which sunk capital is returned would need to be extended beyond the 10 year “average remaining life assumption” as previously adopted. In order to ameliorate pricing-impact concerns, EnergyAustralia has calculated a return of capital component of the revenue requirement equivalent to extending the assumed economic remaining life of existing (ie. pre-2004) assets to 16.2 years⁸. While this approach does extend the period over which invested capital is recovered (thereby increasing regulatory risk for EnergyAustralia), it has the effect of delivering a transition path that mitigates the pricing impact in the earlier years, consistent with the Rule, whilst at the same time ensuring NPV neutrality.

Depreciation of new investment

As indicated in the following sections, for all new investment EnergyAustralia has forecast a capital spend that will enable it to maintain assets at a “steady state” average (10 years) of half their expected useful life (20 years) – a return on capital assumption underpinning our original submission.

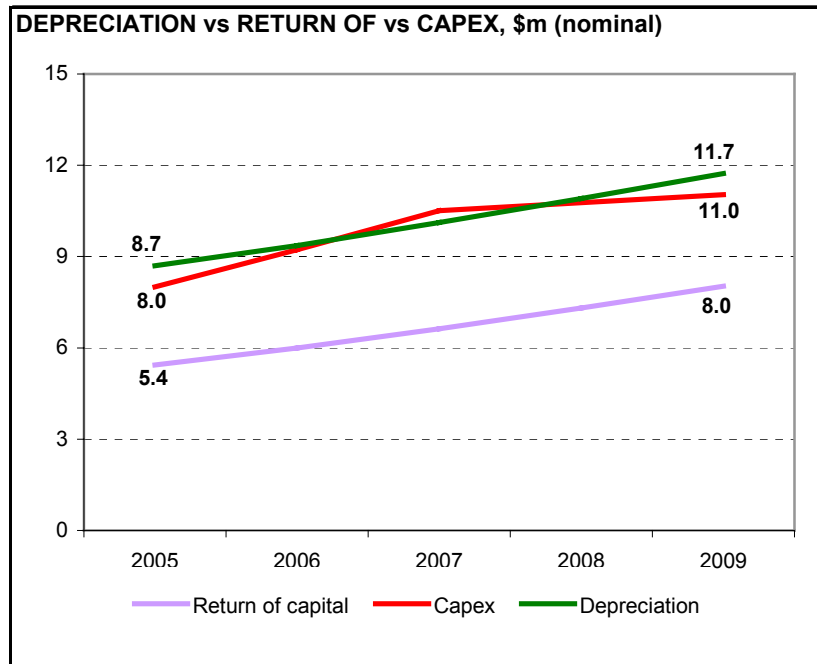
EnergyAustralia commissioned an independent engineering study to examine the reasonableness of its public lighting capital expenditure forecast. In the context of this study, the consulting engineers examined the technical life of the public lighting assets and the economic life of similar assets in other jurisdictions.

This analysis confirmed that 20 years is the appropriate period over which to depreciate public lighting assets.

⁸ EA maintains that 20 years is an appropriate expected life to depreciate new assets (capex).

The sustainable level of capex must be assessed against depreciation based on the technical life of the underlying assets. When this adjustment is made, as shown in Figure 2.1 below, the reasonableness of the expenditure level becomes apparent. This comparison should allay IPART's concerns over the apparent capex and depreciation inconsistency in our original submission.

Figure 2.1 – Relationship between depreciation, return of capital and capital expenditure



As can be observed in Figure 2.1, EnergyAustralia's original pricing proposal did result in a close alignment between capital expenditure and "depreciation" which would have had the effect of maintaining the RAB in constant terms over time. However, IPART's rejection of EnergyAustralia's original pricing proposal has required EnergyAustralia to revise (downward) its "return of" capital proposal which will *a priori* result in a higher RAB at the end of the proposed price path. As indicated in the NERA analysis (as discussed previously), the impact of using the revised (lower) return of capital assumption will be that:

*"lower prices now must mean higher than otherwise prices in future regulatory periods (or an explicit regulatory stranding of asset values)."*⁹

2.2.4. Capital expenditure

EnergyAustralia estimates that, at an approximate replacement value of \$200M,¹⁰ and an expected useful life of 20 years, EnergyAustralia would require an ongoing capital expenditure program in the order of \$10M pa on public lighting infrastructure – a level necessary to ensure that no significant erosion of our asset base would take place.

⁹ *ibid*

¹⁰ Including \$39 million of contributed assets for which EnergyAustralia bears replacement responsibility.

EnergyAustralia has already commenced a public lighting capex program in line with this level. In 2003/04, EnergyAustralia invested \$10 million in public lighting, a significant proportion of which was directed towards the accelerated replacement of existing fluorescent luminaires. It was a level of expenditure consistent with our stated, Council-endorsed objective to replace the remaining 90,000 fluorescent luminaires over the next seven to eight years.¹¹ It was also a level of expenditure consistent with the intention to maintain a steady state 'half life'.

Response to IPART concerns

The November 2004 pricing submission was based on the assumption that the public lighting asset base would remain at a "steady state" of half its 20 year serviceable life. Because that proposal was not based on a roll-forward of the capital base, EnergyAustralia did not provide information on the forecast level of capital expenditure underpinning that submission.

In performing its analysis, IPART referred to the most recent information on file regarding the public lighting capital expenditure forecast; the April 2003 network submission. That submission indicated an ongoing level of public lighting capital expenditure of \$4.7 million, which IPART assessed as insufficient (within the context of a 20 year asset life) to maintain the service capability of the public lighting network. IPART concluded that this was inconsistent with the "steady state" assumption in the public lighting price proposals.

IPART's analysis also indicated, assuming the \$4.7 million capex forecast to be reasonable within the context of the "steady state" framework, that the average remaining life of the system appeared to be in the order of 27 years, rather than the 10 years inherent in the November 2004 pricing proposals.

Both these conclusions were reasonable when based on the assumption that the annual capital expenditure in the public lighting system was in the order of \$4.7 million per year.

EnergyAustralia had in fact revisited and updated its forecast of public lighting capex since the April 2003 network submission was filed. This updated capital expenditure forecast, \$8 million in 2004/5, \$9 million in 2005/6, and \$10 million in each subsequent year, has been incorporated in the pricing proposal in this submission.

The independent engineering study assessed the reasonableness of the capital expenditure forecast in terms of sustainably maintaining the service capability of the system. That study confirmed that EnergyAustralia's forecast level of capital expenditure is consistent with the sustainable delivery of the public lighting service.

EnergyAustralia is confident that the updated forecast level of public lighting capex in the order of \$10 million per year is consistent with maintaining the service capability of the system.

In summary:

- The return of capital for existing assets is set at 16.2 years for the purpose of developing an NPV-neutral price path which we believe should be acceptable to IPART;

¹¹ EnergyAustralia's supplementary submission to IPART on its Public Lighting Pricing Proposals, February 2005, p 4.

- Depreciation of new capital expenditure is based on the 20 year technical life of the equipment;
- In assessing the reasonableness of capital expenditure, it is necessary to have regard to the technical life of the assets.

2.3. OPERATING AND MAINTENANCE COSTS

Operating costs for the public lighting system are primarily driven by lamp replacement requirements, which fall into two categories:

- bulk lamp replacement; and
- spot lamp replacement.

The cost of spot lamp replacement also includes the cost of servicing connections and luminaires where these are the cause of the outage.

Operating and maintenance expenses are driven by the time required for a crew to identify and repair a light under spot replacement, and the cost of the bulk lamp replacement program.

Based on discussions with Councils and supported by detailed statistical analysis, the bulk lamp replacement cycle will be 30 months for Traffic Routes and for Street Lights alike. Bulk lamp replacement is sourced by competitively tendered contract.

Aside from the costs associated with compliance with the draft NSW Public Lighting Code (which EnergyAustralia has not included in this revised pricing proposal), EnergyAustralia's operating cost forecasts have not changed from the November 2004 submission.

2.4. SUMMARY

The following table summarises the calculation of the target revenue requirement:

Table 2.1 – Public lighting revenue requirement

\$M real 04-05	2004/5	2005/6	2006/7	2007/8	2008/9
Operating expenditure	11.8	11.8	11.8	11.8	11.8
Return on / of new capital	0.5	0.9	1.4	1.9	2.4
Return on / of existing capital	11.2	11.4	11.6	11.8	12.0
Total	23.5	24.1	24.8	25.5	26.2
Transitional revenue path	21.7	23.9	25.1	26.3	27.6

3. PROSPECTIVE CHANGES IN PRICES OR RATES

The changes in prices developed through this revised proposal aim to recover prices that are sufficient to sustain the necessary investment in the public lighting system and to enable EnergyAustralia to achieve a commercial rate of return on its investment.

EnergyAustralia proposes a price path featuring a P_0 adjustment of CPI+10%, effective 1 August 2005, followed by annual increases of CPI+5% to 2008/09.

This price path will, in present value terms, allow the public lighting business to generate sufficient revenues to recover its costs as an excluded service.

The Consumer Price Index to be used to calculate prices effective 1 August 2005 will be 2.3%, the same CPI as used to calculate the network weighted average price cap.

3.1. IMPACT OF CHANGES ON CUSTOMERS

3.1.1. Response to Council submissions

EnergyAustralia notes the Councils' response to the November 2004 price proposals, particularly in the Councils' concerns over the impact of the proposed price increases on Council budgets. While the proposed price increases appear large in percentage terms, it must be recalled that this increase is on a small base; the proposed increases to fund the public lighting revenue shortfall are small in absolute terms, and small relative to the Councils' total budgets.

EnergyAustralia has analysed the impact of the November 2004 proposed public lighting price changes on the Councils served. Using revenue and property information from the NSW Department of Local Government,¹² EnergyAustralia has estimated that the price increases proposed in its November 2004 submission, including the impact of rebalancing individual unit prices to provide more accurate price signals, would have had a very small impact on Council budgets for 2005/06 (indeed, only one Council would see a price impact greater than $\frac{1}{2}$ of 1% of its budget) and on individual customers (about \$4 per rateable property on average).

3.1.2. Response to IPART concerns

While EnergyAustralia maintains that the customer impacts embodied in its November 2004 submission were not unreasonable, it acknowledges the Tribunal's comments in relation to customer impacts, and has revised its public lighting pricing proposals accordingly.

This revised pricing proposal results in maximum price increases in 2005/06 for all Councils of less than 0.2% of their total budget. On average, the per Council rate increase is about 1/10 of 1% of Council budget. On a per Council ratepayer basis, all but two local Council areas¹³ see increases of less than \$3.00 per rateable property; an average increase of less than $\frac{1}{4}$ of 1%.

¹² NSW Department of Local Government, Comparative Data 2002/03, http://www.dlg.nsw.gov.au/dlg/dlg/home/dlg_comptime.asp

¹³ City of Sydney and Botany Bay see slightly higher per customer increases (Sydney \$4.99, Botany Bay \$3.46). However, the rate revenues of these councils are dominated by businesses paying high

EnergyAustralia believes that this impact on customers is not “unreasonable” to support continued investment in the public lighting service.

3.1.3. Price rebalancing

As discussed in the November 2004 submission, each public lighting customer is served by a unique composition of assets. As public lighting prices are stated in terms of the cost of each public lighting component, the changes in particular public lighting customers’ bills will vary according to the unique inventory of assets used to serve them.

Public lighting charges are currently levied on a highly averaged basis, resulting in widespread cross subsidies across unit prices and charges to Councils. For example, all brackets are currently charged at an average rate reflecting the cost of a 2 meter bracket. Council areas using shorter brackets currently pay more than the cost to supply these brackets, while Councils using longer brackets (particularly 6m brackets used in heavily treed and traffic route configurations) pay less than the cost to provide service. These incorrect pricing signals may also affect the choice of equipment deployed in new applications, further widening the cross subsidies.

The individual pricing impacts to Councils will depend on the extent to which these cross subsidies are unwound. The pricing impacts in this submission have been calculated assuming all unit charges (and hence all Council bills) are increased by the average pricing increase. While this approach will deliver the revenue requirement over time to EnergyAustralia to sustain investment in the public lighting system, it would also institutionalise these cross subsidies if not addressed in future pricing.

EnergyAustralia acknowledges that some of the concern expressed by councils with respect to our original proposal was as a result of the translation of the overall average price path to the individual council charges. In order to move to a more equitable and efficient form of pricing (that signals the usage costs) the unwinding of these cross subsidies is required. EnergyAustralia’s original submission fully unwound the cross subsidies, and we maintain that this is the economically efficient approach.

However, having regard to the price path included in this proposal, EnergyAustralia is not seeking to undertake any price rebalancing in the first year of the price path. EnergyAustralia will continue to investigate options to improve the cost reflectivity of individual public lighting prices in the context of the flatter pricing trajectory forecast for the outer years of this proposal, and will work with the Tribunal secretariat to develop a manageable pricing transition path at that time.

3.2. TERM OF PRICING PROPOSALS

EnergyAustralia seeks the Tribunal’s approval of a public lighting price increase consisting of a P_0 adjustment of CPI + 10% effective 1 August 2005. This price path would be equally applicable to each unit price in the EnergyAustralia public lighting inventory, thus maintaining cost relationships among Councils. EnergyAustralia also proposes price increases averaging

rates (Sydney \$10,222, Botany Bay \$6,723) relative to those Councils with a largely residential rate base. While the absolute amount of price increase per customer is slightly higher for these Councils, the proposed increase is very small in relation to the annual rates charged to business ratepayers.

CPI + 5% for each of the following three years. During this subsequent period, individual prices may vary within agreed side constraints to allow some scope for individual unit price rebalancing, as discussed above.

This four year price path would recover the costs associated with IPART's excluded service regulatory framework change through a transitional period, while at the same time maintaining NPV neutrality.

However, the transitional price path that recovers the necessary revenues in NPV terms over the next four years requires agreement to a transitional price path beyond the one year horizon as envisaged in the current Rule on Excluded Services.

In order for EnergyAustralia to accept a longer term transitional path, we seek formal commitment from IPART that the pricing trajectory will be recognised in future years, and that only deviations to the price path would be the subject of more detailed review as outlined below.

[Price movements during the term of this pricing proposal](#)

Once the price changes proposed in this submission are in place, EnergyAustralia would seek further IPART approval for any changes during the five year period for unforeseen or indeterminable changes in costs or service levels, such as the introduction of the Public Lighting Code.

Individual proposed unit charges are listed in Appendix 1 and are stated in nominal terms (ie, 2005/06 dollars). It is proposed that nominal prices would be calculated using the change in the Consumer Price Index in a manner consistent with that outlined in the IPART distribution Determination.

APPENDIX 1

PUBLIC LIGHTING PRICE LIST

This Appendix provides the inventory of standard public lighting assets and current list of supported non-standard assets (per the NSW Public Lighting Code) and prices over the term of this price proposal.

Application

The Rate 1 prices are applicable to:

1. Existing public lighting installations on EnergyAustralia dedicated and network poles where EnergyAustralia has funded the installation.
2. New installations of brackets, luminaires and lamps on EnergyAustralia dedicated public lighting poles or existing network poles.
3. Replacement of existing assets where
 - a) EnergyAustralia has funded the initial asset installation cost, or
 - b) The assets are currently mounted on EnergyAustralia infrastructure and charged at Rate 2. Subject to customer agreement, EnergyAustralia will fund the new poles, steel standards, luminaires and lamps. These installations will then transition from Rate 2 to Rate 1.
4. Installation of dedicated lights on dedicated steel standards where the customer agrees to pay a capital contribution to cover any shortfall between the present value of the scheduled prices and the quoted installation costs.

The Rate 2 prices are for assets built under the contestable framework where EnergyAustralia has accepted responsibility for the ongoing operation and maintenance of those assets.

EnergyAustralia will accept new standard public lighting assets which meet network standards, and will charge for their ongoing operation and maintenance as Rate 2 assets.

	Prices 2005-06 (Excluding GST)	
BRACKET	Rate 1	Rate 2
Type 1 (2m outreach)	\$71.51	Nil
Type 2 (3m outreach)	\$71.51	Nil
Type 3 (3m outreach)	\$71.51	Nil
Type 4 (2m outreach)	\$71.51	Nil
Type 5 (2m outreach)	\$71.51	Nil
Type 6 (6m outreach)	\$71.51	Nil
Type 7 (4m outreach)	\$71.51	Nil
Type 2A (3m outreach)	\$71.51	Nil
Type 3A (4.5m outreach)	\$71.51	Nil
0.5 m Outreach Bracket	\$23.64	Nil
0.6 m Outreach Bracket	\$23.64	Nil
1 m Outreach Bracket	\$23.64	Nil
1.5 m Outreach Bracket	\$23.64	Nil
2m Outreach Bracket	\$23.64	Nil
2.5 m Outreach Bracket	\$23.64	Nil
3 m Outreach Bracket	\$23.64	Nil
3.5 m Outreach Bracket	\$23.64	Nil
4 m Outreach Bracket	\$23.64	Nil
4.5 m Outreach Bracket	\$23.64	Nil
5 m Outreach Bracket	\$23.64	Nil
6 m Outreach Bracket	\$23.64	Nil
6.5 m Outreach Bracket	\$23.64	Nil
7 m Outreach Bracket	\$23.64	Nil
8 m Outreach Bracket	\$23.64	Nil
SUSPENDED	\$55.12	Nil
Private supplied bracket	N/A	Nil
1.2 m Outreach Bracket	\$23.64	Nil
C4	\$23.64	Nil

	Prices 2005-06 (Excluding GST)	
CONNECTION	Rate 1	Rate 2
Overhead connection	Nil	Nil
Overhead rate 2 connection	Nil	Nil
Overhead special connection	Nil	Nil
Underground rate 1 connection	\$79.16	N/A
Underground rate 2 connection (2nd light)	N/A	Nil
Underground special connection	Nil	Nil
Underground rate 2 connection	N/A	\$28.78
Underground / Overhead	\$86.36	\$86.36
Underground connection , Newcastle , 2 arm	Nil	Nil

LAMP	Prices 2005-06 (Excluding GST)	
	Rate 1	Rate 2
Incandescent 1*40	\$117.52	\$117.52
Incandescent 1*60	\$117.52	\$117.52
Incandescent 1*75	\$119.23	\$119.23
Incandescent 1*100	\$119.23	\$119.23
Incandescent 3*100	\$129.27	\$129.27
Incandescent 1*150	\$116.80	\$116.80
Incandescent 1*200	\$116.80	\$116.80
Incandescent 1*300	\$128.45	\$128.45
Incandescent 1*500	\$148.58	\$148.58
Incandescent 1*1000	\$114.21	\$114.21
Mercury Fluorescent 1*50	\$21.27	\$21.27
Mercury Fluorescent 1*80	\$21.07	\$21.07
Mercury Fluorescent 2*80	\$25.01	\$25.01
Mercury Fluorescent 3*80	\$28.96	\$28.96
Mercury Fluorescent 4*80	\$32.92	\$32.92
Mercury Fluorescent 7*80	\$44.74	\$44.74
Mercury Fluorescent 1*125	\$31.30	\$31.30
Mercury Fluorescent 2*125	\$31.30	\$31.30
Mercury Fluorescent 6*125	\$102.16	\$102.16
Mercury Fluorescent 1*250	\$22.49	\$22.49
Mercury Fluorescent 3*250	\$35.14	\$35.14
Mercury Fluorescent 1*400	\$29.74	\$29.74
Mercury Fluorescent 2*400	\$56.16	\$56.16
Mercury Fluorescent 3*400	\$74.06	\$74.06
Mercury Fluorescent 1*700	\$45.48	\$45.48
Mercury Fluorescent 1*800	\$16.72	\$16.72
Mercury Fluorescent 1*1000	\$61.07	\$61.07
Mercury Fluorescent 4*1000	\$190.89	\$190.89
Metal Halide 1*70	\$77.82	\$77.82
Metal Halide 1*100	\$94.87	\$94.87
Metal Halide 1*150	\$82.43	\$82.43
Metal Halide 1*250	\$79.50	\$79.50
Metal Halide 1*400	\$81.87	\$81.87
Metal Halide 1*500	\$81.87	\$81.87
Metal Halide 1*1500	\$166.75	\$166.75
High Pressure Sodium 1*50	\$41.48	\$41.48
High Pressure Sodium 1*70	\$42.28	\$42.28
High Pressure Sodium 2*70	\$60.97	\$60.97
High Pressure Sodium 3*70	\$79.64	\$79.64
High Pressure Sodium 1*100	\$45.98	\$45.98
High Pressure Sodium *150	\$33.97	\$33.97
High Pressure Sodium 1*220	\$34.35	\$34.35
High Pressure Sodium 1*250	\$34.35	\$34.35
High Pressure Sodium 2*250	\$48.48	\$48.48
High Pressure Sodium 4*250	\$291.99	\$291.99
High Pressure Sodium 1*310	\$38.81	\$38.81

LAMP	Prices 2005-06 (Excluding GST)	
	Rate 1	Rate 2
High Pressure Sodium 1*400	\$38.81	\$38.81
High Pressure Sodium 2*400	\$57.37	\$57.37
High Pressure Sodium 4*600	\$291.99	\$291.99
High Pressure Sodium 6*600	\$291.99	\$291.99
High Pressure Sodium 1*1000	\$90.17	\$90.17
Low Pressure Sodium 1*90	\$71.20	\$71.20
Low Pressure Sodium 1*135	\$66.82	\$66.82
Low Pressure Sodium 1*180	\$66.82	\$66.82
Tubular Fluorescent 4*15	\$20.36	\$20.36
Tubular Fluorescent 1*20	\$21.72	\$21.72
Tubular Fluorescent 2*20	\$23.91	\$23.91
Tubular Fluorescent 3*20	\$25.28	\$25.28
Tubular Fluorescent 4*20	\$26.65	\$26.65
Tubular Fluorescent 6*20	\$29.40	\$29.40
Tubular Fluorescent 1*26	\$33.38	\$33.38
Tubular Fluorescent 6*36	\$20.36	\$20.36
Tubular Fluorescent 1*40	\$22.12	\$22.12
Tubular Fluorescent 2*40	\$23.87	\$23.87
Tubular Fluorescent 3*40	\$25.64	\$25.64
Tubular Fluorescent 4*40	\$27.39	\$27.39
Tubular Fluorescent 1*80	\$24.60	\$24.60
Tubular Fluorescent 2*80	\$28.85	\$28.85
Tubular Fluorescent 3*80	\$33.11	\$33.11
Tungsten Halogen 1*400	\$120.99	\$120.99
Tungsten Halogen 1*500	\$120.99	\$120.99
Tungsten Halogen 1*750	\$126.96	\$126.96
Tungsten Halogen 1*1000	\$129.98	\$129.98
Tungsten Halogen 1*1500	\$129.98	\$129.98
Mercury Fluorescent 1*500	\$31.75	\$31.75
Tubular Fluorescent 2*14W (T5)	\$23.91	\$23.91

	Prices 2005-06 (Excluding GST)	
SUPPORT	Rate 1	Rate 2
Distribution system Wood Pole non-Traffic route light	Nil	Nil
Distribution system Wood Pole Traffic Route Light	Nil	Nil
Dedicated support & conductor (post June 2005 installation)	\$205.51	Nil
Wall	\$45.19	Nil
Suspended	\$55.12	Nil
Bollard	\$152.75	Nil
Decorative Column	\$99.92	Nil
Private supplied support	N/A	Nil
Rocks Standard	\$120.67	Nil
Macquarie Standard	\$99.92	Nil
Hyde Park Standard	\$262.80	Nil
Column 2.5m-3.5m	\$99.92	Nil
Column 4m-6.5m	\$99.71	Nil
Column 7m-10m	\$122.86	Nil
Column 10.5m-13.5m	\$140.53	Nil
Column 14m-15m	\$150.47	Nil
Mast 15.5m-30m	\$210.36	Nil
Mast 23m	\$292.99	Nil
Mast 25m	\$312.36	Nil
Orion Double Arm	\$69.51	Nil
Column 4-6.5m Orion Water Pipe	\$99.32	Nil
Polo 10.5m decorative 2m outreach	\$299.34	Nil

Luminaires	Prices 2005-06 (Excluding GST)	
	Rate 1	Rate 2
2*20W Tubular Fluorescent	\$11.76	Nil
4*20W Tubular Fluorescent	\$2.85	Nil
1*40W Tubular Fluorescent	\$2.85	Nil
2*40W Tubular Fluorescent	\$2.85	Nil
4*40W Tubular Fluorescent	\$2.85	Nil
1*80W Tubular Fluorescent	\$2.85	Nil
50W Mercury Fluorescent	\$11.57	Nil
80W Mercury Fluorescent	\$11.23	Nil
125W Mercury Fluorescent	\$15.24	Nil
50W High Pressure Sodium	\$13.35	Nil
70W High Pressure Sodium	\$11.41	Nil
100W High Pressure Sodium	\$23.06	Nil
90W Low Pressure Sodium	\$2.85	Nil
250W Mercury Fluorescent	\$32.35	Nil
400W Mercury Fluorescent	\$35.76	Nil
700W Mercury Fluorescent	\$60.56	Nil
1000W Mercury Fluorescent	\$189.99	Nil
150W High Pressure Sodium	\$31.04	Nil
250W High Pressure Sodium	\$31.26	Nil
400W High Pressure Sodium	\$41.74	Nil
1000W High Pressure Sodium	\$214.44	Nil
135W Low Pressure Sodium	\$5.70	Nil
125w/250w Mercury Fluorescent Floodlight	\$52.56	Nil
400W Mercury Fluorescent Floodlight	\$55.96	Nil
700W Mercury Fluorescent Floodlight	\$62.78	Nil
70W High Pressure Sodium Floodlight	\$33.85	Nil
100W High Pressure Sodium Floodlight	\$39.33	Nil
150W High Pressure Sodium Floodlight	\$38.24	Nil
250W High Pressure Sodium Floodlight	\$58.54	Nil
2*250W High Pressure Sodium Floodlight	\$93.59	Nil
400W High Pressure Sodium Floodlight	\$61.47	Nil
2*400W High Pressure Sodium Floodlight	\$107.94	Nil
1000W High Pressure Sodium Floodlight	\$86.02	Nil
100W Metal Halide Floodlight	\$40.66	Nil
150W/250W Metal Halide Floodlight	\$67.86	Nil
400W Metal Halide Floodlight	\$69.56	Nil
2*400W Metal Halide Floodlight	\$0.00	Nil
500W Metal Halide Floodlight	\$0.00	Nil
750W Metal Halide Floodlight	\$0.00	Nil
1000W/1500W Metal Halide Floodlight	\$97.18	Nil
4*600W High Pressure Sodium	\$880.57	Nil
4*1000W Mercury Fluorescent	\$782.74	Nil
6*600W High Pressure Sodium	\$1,298.02	Nil
4*250W High Pressure Sodium	\$765.83	Nil
50W Mercury Fluorescent Bollard	\$6.34	Nil
80W Mercury Fluorescent Bollard	\$6.32	Nil

	Prices 2005-06 (Excluding GST)	
Luminaires	Rate 1	Rate 2
70W High Pressure Sodium Bollard	\$13.12	Nil
2*20W Tubular Fluorescent - WAVERLEY	\$57.15	Nil
4*20W Tubular Fluorescent - WAVERLEY	\$57.40	Nil
4*40W Tubular Fluorescent - WAVERLEY	\$71.22	Nil
70W High Pressure Sodium -PLAIN	\$79.00	Nil
100W High Pressure Sodium -PLAIN	\$69.58	Nil
150W High Pressure Sodium - Parkway 1	\$57.60	Nil
250W High Pressure Sodium - Parkway 1	\$55.67	Nil
400W High Pressure Sodium - Parkway 1	\$58.13	Nil
50W Mercury Fluorescent - PLAIN	\$52.10	Nil
80W Mercury Fluorescent - PLAIN	\$51.58	Nil
125W Mercury Fluorescent -PLAIN	\$61.11	Nil
250W Mercury Fluorescent - Parkway 1	\$51.32	Nil
2*175W Mercury Fluorescent - Parkway 2	\$141.83	Nil
400W - Mercury Fluorescent Parkway 1	\$49.15	Nil
2*400W Mercury Fluorescent - Parkway 2	\$144.74	Nil
3*400W Mercury Fluorescent - Parkway 3	\$81.15	Nil
70W MBI - Macquarie Dec. Ball	\$55.44	Nil
2*26W TF Macquarie Dec. Ball	\$109.92	Nil
125W Mercury Fluorescent - Hyde Park	\$69.65	Nil
150W High Pressure Sodium - Hyde Park	\$71.57	Nil
50W Mercury Fluorescent - Nostalgia	\$46.30	Nil
80w Mercury Fluorescent - Nostalgia	\$40.96	Nil
50W High Pressure Sodium - Nostalgia	\$50.06	Nil
70W High Pressure Sodium - Nostalgia	\$49.76	Nil
50W Mercury Fluorescent - Bourke Hill	\$53.62	Nil
80W Mercury Fluorescent - Bourke Hill	\$88.01	Nil
2*80W Mercury Fluorescent - Bourke Hill	\$115.20	Nil
125W Mercury Fluorescent - Bourke Hill	\$56.69	Nil
70W High Pressure Sodium - Bourke Hill	\$56.96	Nil
80W Mercury Fluorescent - Regal/Flinders Enc	\$101.70	Nil
70W High Pressure Sodium - Regal/Flinders Enc	\$102.93	Nil
250W Mercury Fluorescent - Parkville	\$82.55	Nil
150W High Pressure Sodium - Parkville	\$76.61	Nil
250W High Pressure Sodium - Parkville	\$76.68	Nil
80W Mercury Fluorescent - Bega+Curve Bracket	\$126.43	Nil
250W High Pressure Sodium GEC 'Boston 3'	\$56.41	Nil
80W Mercury Fluorescent - GEC Boston 2	\$2.87	Nil
70W High Pressure Sodium - GEC Boston 2	\$54.18	Nil
80W Mercury Fluorescent - Sylvania Suburban	\$11.23	Nil
2x14W Tubular Fluorescent - T5 Pierlight	\$11.76	Nil

APPENDIX 2

PRICE IMPACTS BY COUNCIL

Council	Total public lighting costs at 2004/5 prices	Total public lighting costs at 2005/6 prices ¹⁴	% increase	Increase per rate payer	Increase as % of average rate	Increase as % of Council budget
Ashfield	\$307,452	\$345,268	12.3%	2.47	0.34%	0.1945%
Auburn	\$403,310	\$452,917	12.3%	2.51	0.28%	0.1408%
Bankstown	\$1,076,112	\$1,208,474	12.3%	2.25	0.24%	0.1310%
Baulkham Hills	\$20,840	\$23,404	12.3%	0.05	0.01%	0.0019%
Botany Bay	\$384,362	\$431,639	12.3%	3.46	0.29%	0.1384%
Burwood	\$186,797	\$209,773	12.3%	2.08	0.29%	0.1286%
Canada Bay	\$382,797	\$429,881	12.3%	1.76	0.25%	0.1180%
Canterbury	\$643,362	\$722,496	12.3%	1.75	0.23%	0.1117%
Cessnock	\$240,582	\$270,174	12.3%	1.42	0.18%	0.0619%
Gosford	\$1,025,076	\$1,151,161	12.3%	1.89	0.31%	0.0762%
Hornsby	\$1,011,858	\$1,136,316	12.3%	2.37	0.32%	0.1372%
Hunters Hill	\$87,988	\$98,810	12.3%	2.39	0.23%	0.1297%
Hurstville	\$463,739	\$520,779	12.3%	1.96	0.29%	0.1299%
Kogarah	\$349,071	\$392,007	12.3%	2.11	0.31%	0.1309%
Ku-ring-gai	\$800,355	\$898,798	12.3%	2.75	0.31%	0.1544%
Lake Macquarie	\$824,268	\$925,653	12.3%	1.38	0.20%	0.0779%
Lane Cove	\$241,673	\$271,399	12.3%	2.27	0.25%	0.1347%
Leichhardt	\$339,003	\$380,701	12.3%	1.46	0.15%	0.0652%
Maitland	\$482,742	\$542,119	12.3%	2.64	0.34%	0.1223%
Manly	\$238,853	\$268,232	12.3%	1.70	0.17%	0.0810%
Marrickville	\$528,518	\$593,525	12.3%	2.16	0.23%	0.1082%
Merriwa	\$10,988	\$12,340	12.3%	0.92	0.09%	0.0180%
Mosman	\$242,071	\$271,846	12.3%	2.37	0.28%	0.1261%
Muswellbrook	\$113,631	\$127,607	12.3%	2.23	0.36%	0.0696%
Newcastle	\$1,183,427	\$1,328,988	12.3%	2.44	0.25%	0.1163%
North Sydney	\$402,924	\$452,483	12.3%	1.47	0.27%	0.0780%
Parramatta	\$4,450	\$4,997	12.3%	0.01	0.00%	0.0005%
Pittwater	\$365,318	\$410,253	12.3%	2.00	0.20%	0.0721%
Port Stephens	\$303,956	\$341,343	12.3%	1.36	0.20%	0.0603%
Randwick	\$829,746	\$931,805	12.3%	2.23	0.28%	0.1407%
Rockdale	\$647,255	\$726,867	12.3%	2.20	0.33%	0.1515%
Ryde	\$727,216	\$816,663	12.3%	2.37	0.35%	0.1493%
Scone	\$68,620	\$77,061	12.3%	1.98	0.25%	0.0637%
Singleton	\$123,563	\$138,761	12.3%	1.71	0.29%	0.0539%
South Sydney	\$623,297	\$699,963	12.3%	1.49	0.16%	0.0662%
Strathfield	\$210,085	\$235,925	12.3%	2.40	0.27%	0.1135%
Sutherland	\$1,458,300	\$1,637,671	12.3%	2.25	0.26%	0.1272%
Sydney	\$1,055,321	\$1,185,126	12.3%	4.99	0.13%	0.0656%
Warringah	\$810,623	\$910,330	12.3%	1.96	0.22%	0.1008%
Waverley	\$431,581	\$484,666	12.3%	1.92	0.28%	0.0841%
Willoughby	\$354,171	\$397,734	12.3%	1.57	0.18%	0.0707%
Woollahra	\$595,710	\$668,982	12.3%	2.86	0.36%	0.1575%
Wyong	\$883,298	\$991,944	12.3%	1.84	0.27%	0.0656%
Average			12.3%	1.93	0.23%	0.1006%

¹⁴ Based on the same inventory as the original public lighting price proposals. The total bill by Council will differ from this amount to the extent there have been changes in the inventory of equipment in service since August 2004.

