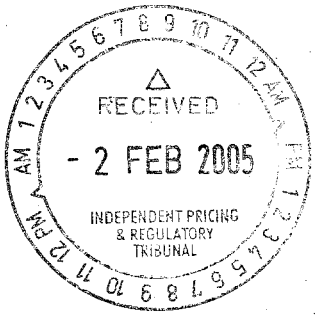
Enquiries to: **Gary Woodman**
(02) 6578 7290

Our Ref: **01/0513**

Your Ref:



31 January 2005

Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB Post Office NSW 1230

Re: IPART's Review of Energy Australia Public Lighting Prices

Council has recently become aware of Energy Australia's proposal to the Tribunal to increase public lighting prices by an average of approximately 28% (in nominal terms) for 2005 and a further 15% on July 2005, a further 8% on 1 July, 2006 and a further 7% on 1 July, 2007.

Accordingly, Council has carried out relevant investigations and is fully supportive of the submission to IPART of Next Energy, Level 12, 220 George Street, Sydney on behalf of the Council's participating in the Street Lighting Improvement Program. A copy of the submission is attached.

Gary Woodman
Director Operations

G:\OPERATIONS\DO - Woodman\corro 2005\01-0513 - Indept Pricing Regulatory Tribunal.doc

Singleton COUNCIL
For a better future...

ABN 52 877 492 396
Address all correspondence to the General Manager:
Civic Centre
Queen Street
PO Box 314
SINGLETON
NSW 2330
DX 7063

Ph: (02) 6578 7290
Fax: (02) 6572 4197
Email:
ssc@singleton.nsw.gov.au
Website:
www.singleton.nsw.gov.au

"Singleton. A progressive community of excellence and sustainability."

Printed on Recycled Stock.

STREET LIGHTING
IMPROVEMENT PROGRAM

14 January 2005

Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB Post Office NSW 1230

Dear Members of the Tribunal,

RE: EnergyAustralia proposal to increase public lighting prices by 70% (real)

On behalf of the 29 councils participating in the Street Lighting Improvement (SLI) Program, I thank you for the opportunity to make this submission contesting EnergyAustralia's (EA's) proposal to increase prices for public lighting services by some 70% (real) over the next 30 months.

The councils participating in the SLI Program represent about 90% of the public lighting in EA's territory, and have been working jointly to achieve reforms to serious longstanding deficiencies in EA's public lighting services. Participating councils may be making separate, but complementary submissions on EA's proposal.

There are seven issues the SLI Program would like to raise for the Tribunal's consideration.

1. Councils urgently need IPART's regulatory protection, as there is simply no recourse to a contestable market for public lighting services with respect to the existing 246,000 lights owned by EA.
The SLI Program understands that the design, construction and maintenance of *new* public lighting is contestable, and that the supply of retail energy for all public lighting is also contestable. However, EA's pricing proposal relates to the public lighting services for the 246,000 existing lights owned by EA. NSW contestability policy, as established in the Electricity Supply Act 1995 and administered by the Department of Energy, Utilities and Sustainability (DEUS), does not provide for contestability with respect to public lighting services for existing EA-owned assets. Councils have no choice with regard to maintenance, modification or removal of these existing lights.

The SLI Program appreciates the Tribunal's efforts to facilitate future contestability by classifying public lighting as an excluded distribution service in the 2004 Electricity Network Price Determination. However, public lighting services related to the EA-owned lights remain a monopoly, and it is therefore essential that councils be provided with clear and strong regulatory protection regardless of how those services are classified.

2. EA's proposed price increase appears to be based on inappropriate costing, and in fact, current prices already appear to exceed, by about 12%, the cost of public lighting services performed in a reasonably efficient manner.
There are several significant deficiencies in EA's cost analysis and pricing proposal. These are discussed in greater length in the attached Appendix and relate to the following:

c/o Next Energy
Lvl 12–220 George St
Sydney NSW 2000
Tel: 02 9251 4072
Fax: 02 9247 5103

Participating Councils: Ashfield • Bankstown • Botany Bay • Burwood • Canada Bay • Canterbury • Gosford • Hornsby • Hurstville • Kogarah • Ku-ring-gai • Lake Macquarie • Lane Cove • Leichhardt • Marrickville • Mosman • Newcastle • North Sydney • Randwick • Rockdale • Ryde • Sydney • Strathfield • Sutherland • Warringah • Waverley• Willoughby • Woollahra • Wyong

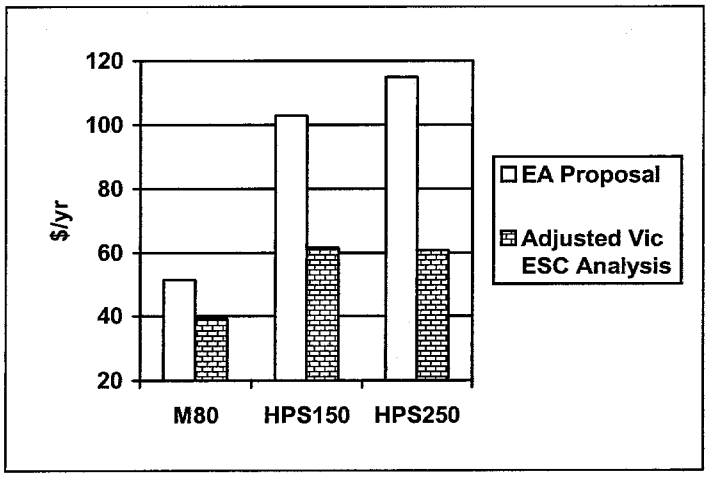
Inappropriate Costing	Value ($m/yr)
a) Excessive costs resulting from obsolete and highly inefficient practices	$6.7m[1]
b) Overstated depreciation costs based on inappropriately short assumed asset lives	$1.4m
c) Inappropriate proposed new charges for existing dedicated connection assets	$7.0m
d) Double counting the cost of fault repairs required by the Public Lighting Code	$2.3m

The above inappropriate costs total over $17 million/yr which is slightly more than EA's proposed price increase. Eliminating these proposed charges would result in a price reduction of about 12% from current levels. It is our view that EA should therefore be implementing a price reduction.

3) EA's proposed prices for major lighting types are greatly in excess of the costs assessed by the Victorian Essential Services Commission (ESC) during the course of its review of public lighting charges.

During 2003 and 2004, the ESC undertook a review of public lighting charges, and performed detailed analysis and modelling of public lighting costs. The ESC's detailed analysis investigated three main lighting types which are also now the defaults for all new and replacement lighting in EA's territory. The results of that in depth ESC analysis are summarised in Figure 1. EA's proposed prices for these common lighting types are some 31% to 89% above the costs assessed by the ESC.

Figure 1. Comparison of EA Pricing Proposal and Victorian ESC Detailed Cost Analysis



NOTES:
1) Cost comparison based on Vic ESC estimate of bulk & spot O&M including overhead, installed capital costs for brackets and luminaries in urban areas.
2) EA costs assume all M80 use 2m bracket; HPS use weighted average of actual traffic route brackets types
3) For consistency with NSW approach, VIC ESC analysis adjusted to assume all assets are DNSP funded; and 7% ROI

4) Councils would appreciate the opportunity to comment on the specific details of EA's proposed 'transitional price path by Council' referred to as Appendix 3, but not published.

This is particularly the case for those councils that might be burdened with proposed increases greater than the 70% average requested by EA. It is possible that those so burdened may wish to perform additional analyses and make additional submissions regarding the details of their case. To date, councils have only been informed by EnergyAustralia on 10 January 2005 of the

[1] EA's poor technology practices result in excessive energy consumption, which burdens councils with excessive charges for retail energy and network use of about $0.9million /year, and produces excess greenhouse gas emissions of about 12,000 t CO2 / yr.

details of a proposed price increase to apply from March to June 2005. We note that several councils have expressed strong concern about the late notification and lack of detail provided.

5) IPART approval of EA's proposed price increase would send a poor signal with respect to electricity sector reform.
Approval would be viewed by many as rewarding EA's poor performance, and as burdening councils and the public with inequitable cost shifting that results in reductions in services provided by councils to ratepayers. It would be difficult to reconcile such pricing with public confidence in electricity sector reform. It would also set an unhelpful precedent and may prompt other utilities to lower their standards and seek similar price increases, resulting in burden to all ratepayers in NSW.

6) EnergyAustralia Proposing Additional Charges for Removal of Highly Obsolete Assets.
In addition to the pricing proposals made in its submission to IPART, EnergyAustralia has proposed to members of the SLI Program that councils be charged $150 capital recovery charge per luminaire in addition to labour charges for any removal of highly obsolete fluorescent lighting before it has reached 20 years of age. In short, to have EnergyAustralia remove assets it almost certainly should not have installed in the first place, councils would have to pay the company at least $15-18,000,000 of capital charges for the 100,000-120,000 highly obsolete fluorescent lights on EnergyAustralia's network, and pay a potentially comparable amount for labour costs associated with removal of these assets.

7) While EA's proposed price increase is highly inappropriate, the SLI Program welcomes some of the changes that EA is beginning to undertake.
These include changes in technology practices such as ceasing to install obsolete equipment, and instituting a planned maintenance regime, both undertaken with the support and urging of the SLI Program. These changes should both significantly reduce EA costs and improve lighting outcomes. The Program also welcomes the good faith demonstrated by EA in sharing some of the analyses performed to date, and the level of open communication in general. In particular, the Parsons Brinkerhoff Associates (PBA) 'cost to serve' report commissioned by EA is the first comprehensive look at public lighting costs within EnergyAustralia, and PBA and EA are to be commended for making significant advances in an area that had been largely neglected.

Thank you again for the opportunity to make this submission. The SLI Program would be pleased to answer any questions you have related to the matters raised.

Yours sincerely

Graham Mawer
Program Manager

APPENDIX

EnergyAustralia Overestimates of Appropriate Public Lighting Service Costs

1) Excessive costs resulting from highly inefficient practices

Over the past two years, the SLI Program has undertaken analyses of EA's technology practices. These indicated that EA has been applying several technologies that have long been recognised as obsolete by electricity companies across Australia.

The SLI Program brought these obsolete technology practices to the attention of EA. EA's analyses, performed as part of PBA's cost to serve work, indicate that the **obsolete assets and practices increase public lighting service costs by $5.5 million per year**[2]. In addition, **EA's analysis assumed inefficient spot repair practices which increase costs by about $1.2 million per year over reasonable performance levels**. Finally, it should be noted that unduly high energy consumption resulting from these inefficient practices also directly costs councils an additional $0.9 in NUOS and energy charges, and result in needless emissions of over 12,000 tonnes of CO2 annually.

Examples of EA's highly inefficient technology practices include the following:

a) continued installation of 'tubular fluorescent twin 20 watt' (TF2x20) luminaires despite their having become technically and commercially obsolete nearly 20 years ago. Notably, in addition to having high overall costs due to high outage rates, these devices provide virtually no compliance with Australian Standards for road lighting, and poor service levels due to their poor reliability. EA has only recently ceased installing new TF2x20 luminaires, as of July 2004, after the repeated efforts by the SLI Program to inform EA as to the high cost and poor performance of these devices;

b) poor scheduling of spot repairs resulting in excessive travel times and labour costs. In particular, EA has assumed that travel times for spot fault repairs average 40 minutes. This suggests a mean distance between spot repairs of at least 20 km, which is highly excessive, assuming reasonable logistics are applied to maintenance practices. Notably, the Victorian ESC's detailed cost analysis and modelling indicates that spot repair times at Victorian DNSPs – including those servicing areas with similar characteristics to EA - are about half of that assumed by EA.

c) prescribing bulk lamp replacement schedules of 18 months for mercury vapour lamps, despite their having life and performance characteristics appropriate for a 30 to 36 month cycle;

d) use of halo-phosphor fluorescent lamps with short lives and high outage rates, rather than much longer lived and more reliable tri-phosphor lamps in all types of fluorescent fixtures; and

[2] "Existing Portfolio of Lights" estimated cost of $27.3 million / year (p. 55); and $22.8 for 'Portfolio A," (p. 56) which is intended to represent appropriate practices and technology, for a difference of $4.5 million / year. While Portfolio A largely represents appropriate practices, there is at least one notable exception, in that it specifies an 18 month bulk lamp replacement schedule for mercury vapour, rather than a more appropriate 30 to 36 month schedule. This results in a cost overstatement of about $0.9 million / year.

e) continued use of high wattage mercury vapour lighting on main roads (e.g., MBF 250W and MBF 400 W) rather than higher efficiency high pressure sodium (HPS) lamps and, in the interim, HPS retrofit lamps.

It would be inappropriate to charge councils for EA's excessive costs resulting from longstanding highly inefficient technology practices. There are numerous reasons, including the following:

- **Charging for highly inefficient practices such as the continued use of obsolete technology would appear inconsistent with the National Electricity Code.** A key objective of distribution service pricing as specified in the NEC is to achieve a commercial revenue stream that includes a fair and reasonable rate of return to Distribution Network Owners *on efficient investment, given efficient operating and maintenance practices* of the Distribution Network Owners"[3] (emphasis added). Similarly, pricing regulation is intended to "...seek the same outcomes as those achieved in competitive markets."[4] EA's longstanding obsolete practices are highly inefficient.

- **EA has had responsibility to ensure that the lighting technology practices in question were efficient and current – and failed in this responsibility.** Historically, councils have had little say on technology selection, and have been dependent on EnergyAustralia for performing public lighting services efficiently. Technical expertise and the vast bulk of technical lighting decisions have rested with EnergyAustralia and its predecessors for some ten decades. This is explicitly illustrated, for example, in agreements dating back decades which specified that EA would "keep the lamps and all appliances...efficient and reasonably in accordance with the latest improvements" [5] and that EA "has been exercising a close control over all aspects of costs with a view to minimising price increases."[6] Councils have had every reason to expect that EA makes appropriate technology choices.

- **EA technology practices fell far below industry norms – there was long-standing acceptance and use of superior alternative approaches by other utilities,** including those in NSW. The proposed alternative approaches are commercially available and well demonstrated. It is particularly notable that the TF-20W and TF1*40W fixtures have long been recognised as obsolete by virtually all other utilities in Australia. In contrast with EnergyAustralia, which has continued to install these obsolete fixtures through 2004, other utilities generally ceased installing them in the 1980s, with some even undertaking active campaigns to accelerate their replacement. Similarly, with respect to main roads, most utilities in Australia and in other parts of the developed world began phasing out mercury vapour lighting up to 20 years ago, generally replacing it with high pressure sodium lighting.

- **Councils have had no input on lighting technology in use across the large majority of existing lighting assets and practices.** With respect to luminaires, the large majority of existing assets in EA's territory involve replacement of failed units. In the case of luminaire replacements, the technology choice has typically been made unilaterally by EA without any council consultation. With respect to lamp selection (e.g., use of short life halophosphor lamps), again, the choice has been made unilaterally by EA without council communication, as one element of its maintenance activity.

- **On those occasions in which some council input was involved, councils generally requested and relied on EA advice – and that advice was typically incorrect and**

[3] National Electricity Code, Section 6.10.2 "Objectives of the distribution service pricing regulatory regime to be administered by the Jurisdictional Regulators"
[4] National Electricity Code, Section 6.1.1 "Summary of key principles and core objectives of network pricing"
[5] PBA "Streetlighting Cost to Serve" 16 October 2003, which cites that council contracts from the 1970s specified that EA shall "keep the lamps and appliances...efficient and reasonably in accordance with the latest improvements." p. 28.
[6] Sydney Electricity letter to councils, 27 June 1991.

incomplete. For example, councils have regularly received requests from the public for additional lighting to be installed. In those cases, the normal practice was for the council to refer the request to EA, seeking advice as to whether and what type of new luminaire would be appropriate. EA regularly recommended use of additional TF2x20s.[7] Furthermore, it should be noted that EA also continued to encourage the use of TF2x20s through prices which were lower than those for the better performing mercury luminaires widely used by other utilities, and indicating that such cost differences were cost-reflective.[8] The pricing, based on poor cost analyses, continually and inappropriately encouraged councils to accept TF2x20s.

- **Councils have no choice with respect to the public lighting assets owned by EA – there is no contestability nor competition with respect to these assets.** NSW contestability policy does not provide for contestability of ownership for the existing EA-owned assets. EA is a monopoly provider of public lighting services using these assets, so there is no opportunity for councils to seek more efficient practices from alternate providers.

2) Overstated depreciation costs based on unduly short assumed asset lives

EA's cost analysis understates asset lives, resulting in proposed depreciation charges that are too high. In particular, whereas a 35 year average asset life is reasonable for brackets and connection assets (as indicated by the ESC's detailed analysis and EA's own practices), EA has assumed a 20 year asset life in calculating depreciation costs.

EA has estimated the replacement cost of brackets and connections in the existing public lighting inventory at about $65 million. Basing the depreciation charge for these $65 million of assets on an assumed 20 year life, as EA has done, overstates the actual 35 year depreciation charge by $1.4 million/year.

There are several reasons why it would be inappropriate to charge councils this excessive depreciation cost, including the following:

- **Thirty-five years, not twenty years, is a reasonable estimate of average bracket and connection asset life.** While twenty years may be a reasonable assumption for the average life of luminaires, it is not appropriate for brackets and connections. Many brackets and connections still in use today were installed in the early 1960s, and EA's records do not indicate that there are more than a few bracket failures each year. Notably, the Victorian Essential Services Commission has indicated a 35 year average life brackets in its analysis of public lighting charges.[9] This would appear more consistent with the average age of brackets on EA's system.

- **Adopting a highly inaccurate depreciation life assumption would be inconsistent with accounting standards and policy.** Australian Accounting Standards (AAS4/AASB1021) and NSW Treasury policy (TPP 03-02 May 2003) support the use of more accurate average life estimates in assessing depreciation costs. These documents direct that assets be depreciated over their useful lives and that the depreciation rate be reviewed regularly. Adopting EA's assumed 20 year asset life would be inconsistent with both the AAS and the NSW Treasury policies.

---

[7] See, e.g., a general design guidance provided in a letter from EnergyAustralia to Sutherland Shire Council, 16 April 1997; and numerous specific examples, e.g., EnergyAustralia, letter to Burwood Council, 8 September 2003.

[8] See, e.g., Sydney Electricity, letter to Marrickville Council, 12 May 1995 in response to a query regarding the most cost efficient and lowest cost lighting solution for residential streets.

[9] Essential Services Commission "Review of Public Lighting Excluded Service Charges – Draft Determination" April 2004, p. 48.

- **Councils have no choice with respect to the public lighting assets owned by EA – there is no contestability nor competition with respect to these assets.** As discussed above, NSW contestability policy, as established in Electricity Supply Act 1995 and administered by the Department of Energy, Utilities and Sustainability, does not provide for contestability of ownership for the existing EA-owned assets. EA is a monopoly provider of public lighting services using these assets, so there is no opportunity for councils to seek more appropriate capital treatment from alternate providers.

- **Recent capital investment much lower than suggest by 20 year life asset life** - In recent years, EnergyAustralia appears to have been investing considerably less than the $9m per annum suggested by their valuation of $180m for the current public lighting assets and a 20 year asset life.

3) Inappropriate proposed new charges for existing dedicated connection assets

EA has proposed creating a large new charge, totalling some $7 million annually, for assets not currently in the public lighting asset inventory. The SLI Program understands that the proposed charge primarily relates to underground low voltage mains serving public lighting.

It would be inappropriate to impose this new charge on councils for several reasons, including the following:

- ***The proposal would impose charges for assets originally funded by councils and other parties, and not funded by EA.*** Notably, underground and many other types of public lighting connection assets were originally funded not by EA, but by councils[10], developers at the requirement of councils, the RTA[11], the Energy Authority of NSW[12] or other parties. It has been the longstanding policy of EA to require councils and developers to fund additional installation costs involving underground mains.[13] While the assets are owned by EA, they were funded by other parties, and there is therefore no basis for EA to now impose charges on councils for them. The SLI Program would be pleased to provide IPART with copies of past contracts, policy statements, correspondence and sample invoices illustrating these points as required.

- **The proposal would be inconsistent with the financial basis on which councils selected the lighting assets in question.** Over many years during which the underground network assets serving public lights have been installed, councils were informed by EA of the costs involved for the new lighting schemes (both capital contributions and ongoing charges), and Councils then decided whether to proceed based on the quoted charges. The proposed new charges would constitute a significant change in the financial and commercial basis under which the lighting assets were chosen, and would be inappropriate and inequitable.

- **The proposal would not increase economic efficiency.** New fixed charges for existing assets would appear to offer no prospects for increased economic efficiency.

- **IPART's capital contributions determination is an appropriate approach to charging for dedicated public lighting connection assets going forward.** That determination[14]

[10] Numerous examples available for several councils for both underground and overhead public lighting works.

[11] See, e.g., Letter from Roads and Traffic Authority to Sutherland Council, 26 August 1994; and letter from Sydney Electricity to Sutherland Shire, 30 March 1995, regarding RTA making direct payment to Sydney Electricity for installation costs for new lighting.

[12] See, e.g., letter from Sydney County Council to Bankstown Council, 25 August 1986, regarding the Energy Authority paying the installation costs for the new underground lighting.

[13] There are numerous letters, policy and contractual documents to such effect, dating at least as far back as 1959 (See Memorandum of Agreement between Sydney County Council and Botany Council, clause 12, 1959).

[14] IPART, "Connections to Electricity Distribution Networks in New South Wales" Determination No 1 2002, April 2002.

establishes a framework for determining how much customers will be required to contribute towards the capital costs of connecting them to the electricity distribution network. Notably, the determination appears to be entirely consistent with longstanding Energy Australia policy regarding new underground public lighting connections.

4) Double counting the cost of fault repairs required by the Public Lighting Code (PLC)

EA has asserted that it will cost $2.3 million annually to comply with the provisions of the draft Public Lighting Code, primarily due to the requirement to repair faults within a specified timeframe.

This suggested cost appears entirely inappropriate and should be dismissed for the following reasons:

- **EA's estimate of public lighting service costs prior to the introduction of the Public Lighting Code already includes fault repairs and other maintenance**. Notably, EA indicates that under the PLC, it would establish several new dedicated public lighting crews. These would perform the fault repair work currently being performed by existing general purpose crews. In its pricing proposal, however, EA has not deducted the costs incurred by those general purpose crews. This appears to be a simple case of double-counting of labour costs.

- **The PLC requirement would not increase EA's costs, if the repairs are conducted in a reasonably efficient manner**. Two main requirements within the PLC would be achieving a set schedule for repair of faults, and introducing planned maintenance (e.g., bulk lamp replacement). Achieving these would require changes in EA's practices (e.g., implementing efficient scheduling of maintenance work) but should not create new and more costly maintenance jobs. In fact, the requirement for bulk lamp replacement would reduce the number of fault repairs substantially. By EA's own analysis, this type of modern maintenance practice would reduce costs, not increase them. Bulk lamp replacement is well accepted in other jurisdictions as a useful preventive maintenance strategy that is both more efficient and economic.