



8th August 2008

Mike Buckley
General Manager
Network Regulation North Branch
Australian Energy Regulator
c/o aerinquiry@aer.gov.au

Dear Mr Buckley,

Re: SSROC Submission on EnergyAustralia's Public Lighting Proposal for 2009-14

Thank you for the opportunity to comment on the public lighting aspects of EnergyAustralia's Regulatory Proposal for 2009-2014.

The Southern Sydney Regional Organisation of Councils (SSROC) established and oversees the Street Lighting Improvement (SLI) Program to implement the recommendations of an extensive review of street lighting undertaken by its members some years ago. There are 34 Councils participating in the SLI Program ranging from southern Sydney through to the Central Coast and Hunter. Collectively the 226,000+ street lights in the participating Councils' jurisdictions constitute over 94% of EnergyAustralia's street lights and over 40% of street lights in NSW.

EnergyAustralia proposes to increase capital and maintenance charges for street lights by about 63%¹, and increase network distribution charges for street lights by more than 90% over the 2009-2014 regulatory period.

Unfortunately, EnergyAustralia's pricing proposal provides very limited supporting information regarding costs, impeding detailed review and comment (see SSROC letter to EnergyAustralia CEO of 16 July 2008). Cost-to-Serve modelling and supporting assumptions required to substantiate cost claims have not been provided to Councils by EnergyAustralia as of the AER deadline for comment of 8 August 2008. SSROC and the 34 Councils in the SLI Program therefore reserve their right to make supplemental submissions to the AER pricing review once appropriate cost modelling and supporting material is provided.

If approved by the AER, EnergyAustralia's pricing proposal could result in material subsidies from Councils to EnergyAustralia, inappropriate price signals, inefficiencies, and reduction in public welfare.

Participants in the SLI Program strongly welcome the AER's recent comments at its 30 July public forum about the importance of transparency and the acknowledgement of the significant information asymmetry in the review of public lighting price proposals. SSROC notes that the cost modelling and supporting material requested of EnergyAustralia was made available to Councils in the last major pricing reset and that EnergyAustralia agreed to provide it at the 30 July 2008 AER Forum.

While Councils appreciate that the AER is bound to meet a number of pricing review timetable provisions, it is unreasonable to expect meaningful input from stakeholders without full information disclosure within a

¹ 38.6% real increase, together with an assumed 3.5% annual increase in cpi.

reasonable review timeframe. To bring confidence in the pricing regime, it is essential that pricing reviews be based on clear, timely and open disclosure of cost analyses that can then be robustly tested and benchmarked by the AER, its advisors and stakeholders. This is particularly the case for public lighting which has a number of complexities and has been the source of considerable recent concern for NSW Councils.

Background

Effective public lighting is vital for the safety and security of the community. Unfortunately, in recent years there have been serious governance, service, technology, and pricing, challenges in public lighting.

Further detailed background on these issues is provided in a Briefing Paper submitted to the AER on 21 July 2008.

Areas of Concern in EnergyAustralia's Pricing Proposal

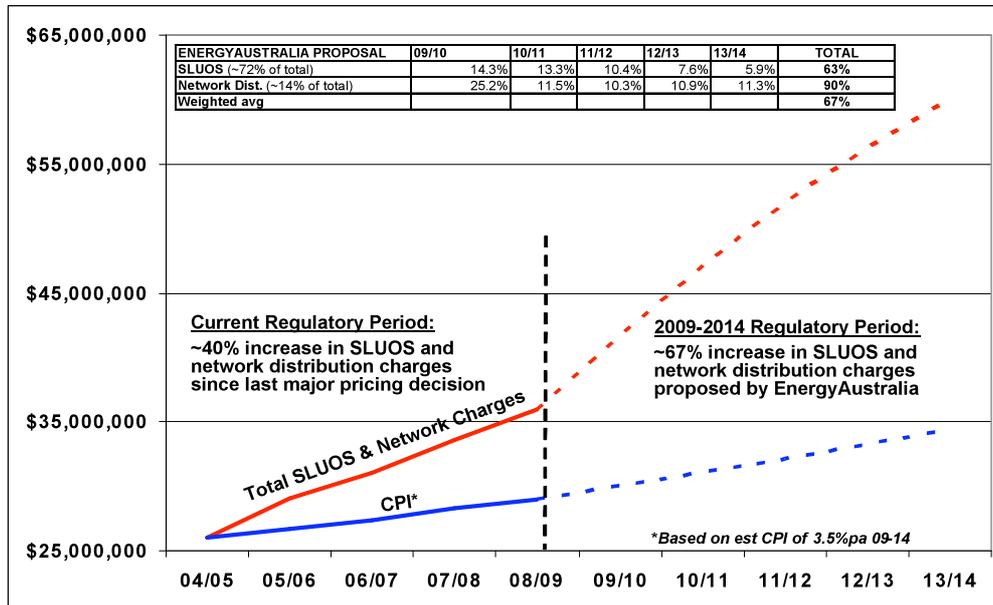
In advance of receiving the cost modelling and supporting detail from EnergyAustralia, SSROC would like to bring a number of items to the attention of the AER that require further information and/or analysis:

1) EnergyAustralia's ongoing, rapid price increases appear excessive and demand the highest standard of substantiation and regulatory review

The drastic increases proposed by EnergyAustralia require a higher standard of substantiation and regulatory review than might otherwise be the case for three important reasons:

- **Customers have already been burdened with extreme price increases over the past 5 years** - EnergyAustralia's 2009-2014 public lighting pricing proposal to the AER follows very significant increases in capital and maintenance charges totalling some 40% since 2005. Similarly, public lighting network distribution charges have increased 40.3% since 2004/05.
- **EnergyAustralia provides inadequate cost information to justify a further extreme price increase** - EnergyAustralia's 2009-2014 proposals to increase public lighting maintenance and capital charges by about 63% and network distribution charges for public lighting by over 90% are not supported by data and analysis.
- **Customers Have Tremendous Difficulty Managing Large Increases** - Underlining the importance of pricing being no higher than warranted is the difficulty for Councils in managing large increases under NSW rate capping (currently at 3.2% nominal). Of particular note is that the large first year increase in capital and maintenance charges proposed by EnergyAustralia of 11% plus CPI.

EnergyAustralia Proposed 2009-2014 Street Lighting Price Increases



2) Analysis and Benchmarking of EnergyAustralia's cost assumptions and pricing is urgently needed

Councils strongly welcome the AER's recent comments at its 30 July public forum that pricing is to be fair and reasonable, reflecting the efficient cost of service. There is significant Council concern that EnergyAustralia's claimed cost of service for public lighting is insupportably high.

Two steps are required in examining whether EnergyAustralia's pricing proposal is fair and reasonable, and reflects the efficient cost of service.

The first step is detailed review, analysis and validation of EnergyAustralia's cost modeling and cost assumptions. SSROC looks forward to commenting on EnergyAustralia's pricing model when it becomes available.

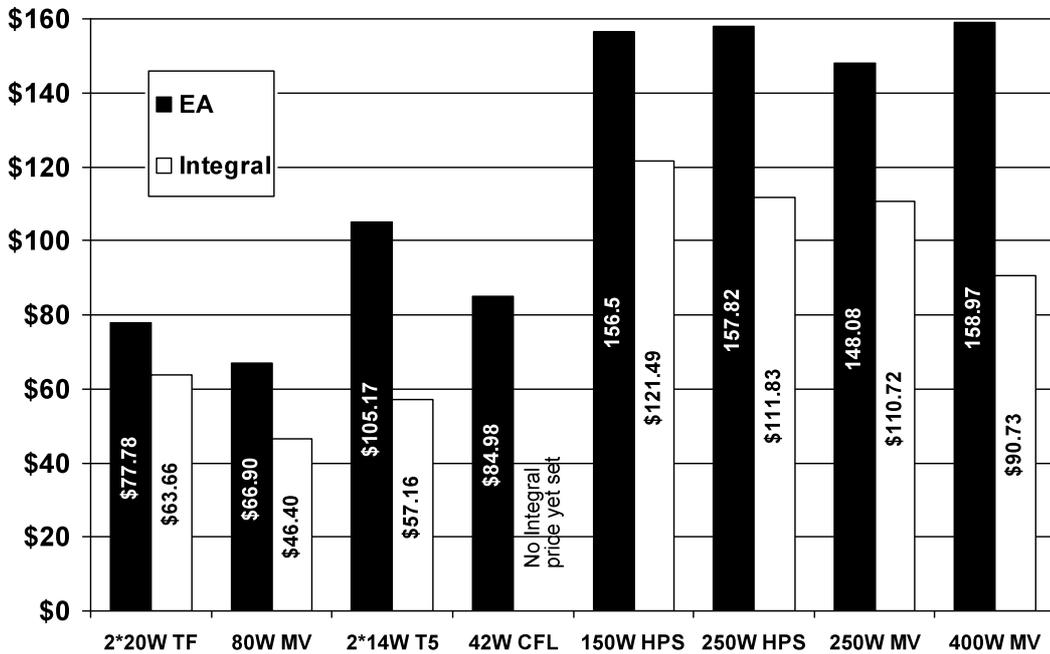
The second step is transparent and independent benchmarking of EnergyAustralia's cost assumptions and pricing against other RNSPs in NSW and the NEM. Indeed an open and transparent validation process led by the AER is an essential step, given the concern about the basis of current pricing and magnitude of proposed price increases.

The Essential Services Commission (ESC) Victoria review of public lighting prices provides an important reference. In that review, the ESC developed a detailed independent model that incorporated all relevant cost elements for the leading lighting types.² Key assumptions and the model itself were published and subject to public review and comment. This approach provides a thorough, transparent basis upon which to assess proposed lighting prices, and clear benchmarking data for all stakeholders.

Comparison of current EnergyAustralia Rate 1 pricing for the most common light types with current 2008/09 Integral Energy pricing for the equivalent tariff suggests that, as a starting point, there are already significant unexplained differences in the pricing of key lighting types used by EnergyAustralia and, in particular, for new energy efficient lights that are likely to dominate the portfolio by the end of the regulatory period (see graphs below).

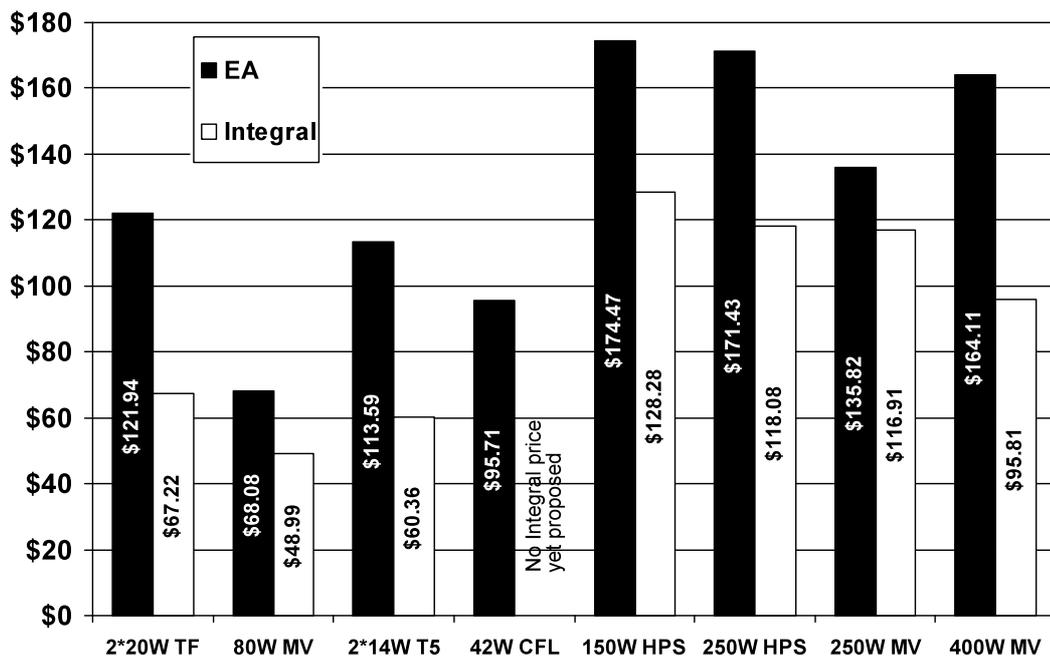
²<http://www.esc.vic.gov.au/public/Energy/Regulation+and+Compliance/Decisions+and+Determinations/Review+of+Public+Lighting+Excluded+Service+Charges/Review+of+Public+Lighting+Excluded+Service+Charges.htm>

EnergyAustralia 2008-09 Rate 1 Pricing 22-84% higher than Integral Energy for key light types



For the most common lighting types, publicly listed EnergyAustralia 2008/9 Rate 1 pricing for key light types is 22-84% higher compared to the equivalent Integral Energy Schedule 1 Tariff. These wide gaps, particularly for energy efficient lighting types, persist in 2009/2010 proposals as per the figure below based on submissions to the AER by EnergyAustralia and Integral Energy.

EnergyAustralia 2009-10 Rate 1 Pricing 16-88% higher than Integral Energy for key light types



Particularly intensive analysis and benchmarking of energy efficient lighting is urgently required

it is particularly important that there is appropriate pricing for new energy efficient lighting so as not to discourage the timely adoption of greenhouse mitigating technologies. The pricing proposed by EnergyAustralia for new energy efficient lighting appears high compared to current lighting types, with respect to the known underlying capital costs of this equipment and, in the case of the most common energy efficient light, the T5, with respect to Integral Energy. Integral Energy has the largest population of T5 lights in Australia. While T5 and CFL lights are not currently widely used by EnergyAustralia, an appropriate price for new energy efficient lighting is a material issue for SLI Program Councils over the regulatory period as up to half of all residential road lighting is expected to be replaced as EnergyAustralia removes aged, obsolete and poorly performing TF 2*20 and other obsolete tubular fluorescent luminaires, as well as undertaking normal replacements amongst the balance of the lighting population.

3) Annuity-Based Financial Calculations

EnergyAustralia proposes an inappropriate and costly change in pricing approach referred to as annuity-based financial calculations (Part II - Section 7.4.1). SSROC notes that:

- There appears to be no comparable precedent within the Australian electricity sector for EnergyAustralia's novel annuity approach. Certainly, EnergyAustralia does not cite any precedent.
- EnergyAustralia made a previous similar proposal during the 2004-05 pricing reset that was challenged by Councils, not supported by IPART, and subsequently withdrawn by EnergyAustralia.
- While EnergyAustralia does not provide detail of its proposed calculation approach, the previously presented model in 2004-05 treated existing street lighting assets as if they were all new, making no adjustment for their significant age. As a result, the annuity-based financial calculations significantly overstated the appropriate capital cost recovery for existing street lighting assets by approximately 12%.
- IPART's consultants in the 2004 pricing review identified several cautions regarding EnergyAustralia's proposal,³ all of which remain unaddressed by EnergyAustralia. While it might be possible to apply an annuity method, and to make an adjustment to account for age, exceptional care would need to be taken, as the approach is novel and has not been carefully examined.

4) Proper Treatment of Average Asset Life

It is unclear from EnergyAustralia's pricing proposal whether there is proper treatment of average asset life for brackets and poles. While there are references to lighting assets generally having an asset life of 20 years, there does not appear to be acknowledgement of the longer asset lives of poles and brackets. Proper treatment of the average asset life of these asset classes is essential to appropriate financial calculations.

Notably, the detailed cost assessment performed by the Essential Services Commission Victoria determined that the appropriate life of brackets and dedicated poles is 35 years.

5) New and Novel "Rate 4"

EnergyAustralia is proposing to introduce a novel new tariff for assets removed before the end of their economic life. EnergyAustralia's Rate 4 is proposed to apply "...in circumstance where a customer has chosen to have EnergyAustralia retrofit a component before the end of its useful life (for example, with a higher efficiency luminaire). In this circumstance, in addition to the published Rate 4 tariff, the customer will be required to reimburse EnergyAustralia for the stranded cost of the component being replaced, calculated at half the replacement value. Rate 4 applies to retrofits of components for which a customer has previously been charged under Rate 1."

⁴This needs careful consideration for the following reasons:

- It is unclear why, having paid out undepreciated capital in an existing asset, there would be a basis for a "Rate 4" tariff at a premium to Rate 1;
- It is unclear whether this premium would apply in perpetuity and, if so, on what basis;

³ Allen Consulting Group, "Principles for determining regulatory depreciation allowances" Note to IPART, September 2003.

⁴ EnergyAustralia Regulatory Proposal 2008 - Part II p194

- It would be inappropriate for a customer to be required to reimburse the stranded cost of the component being replaced based on an arbitrary assumed age of half the asset life (eg 10 years under EnergyAustralia's assumed asset life of 20 years). The real age of the asset should be used to calculate the stranded cost (see next item).
- It would be inappropriate for a customer to be required to reimburse the stranded cost of the component being replaced at half the current written-up replacement value. The appropriate reimbursement should be the depreciated value of the original installation cost. Notably, the current written-up replacement value may exceed the initial installation cost.
- The current written-up replacement value also presents an unreasonable barrier to exit in the limited cases where it is feasible for Councils to remove EnergyAustralia lights and install their own lighting assets (eg in parks of CBD areas with underground supplied lighting).

6) Clarity Required on Obsolete Asset Removal

It is unclear from the language used in EnergyAustralia's pricing proposal that it intends to adhere to the commitment given to IPART and Councils in 2005 to undertake a seven to eight year accelerated replacement program to remove obsolete tubular fluorescent lighting from its network.⁵ There are perhaps 60,000 of these assets remaining on the EnergyAustralia network. Notably, the tubular fluorescent asset replacement program is not complete and has been delayed because of inappropriate delays in granting technical approval to energy efficient alternatives and high price proposals for these lights.

As was extensively commented on by Councils in the 2004-05 pricing review, EnergyAustralia continued installation of TF2*20 for at least fifteen years beyond the time at which those were recognised by other utilities to have become technically obsolete. This technology represented reasonable practice when installations began in the late 1950s. However, by the 1980s, it had been superseded by the 80W mercury vapour technology, which provided far higher reliability, lower overall cost and far more light. The TF2*20 achieves minimal standards compliance at a spacing of about 30 meters, far less than typical light spacing on residential roads of up to 80m. Notably, in contrast to Victoria, which began proactively removing TF2*20 beginning in the mid 1980s, EnergyAustralia continued to install them as the default technology until 2004, after repeated requests from Councils to stop the use of this technology.

A key inter-related issue is that in 2009, EnergyAustralia is proposing a 78% first year increase in the SLUOS costs for TF2*20 lighting. It is unclear why Councils should now bear full responsibility for lighting assets that were obsolete when installed, creating a costly, poorly performing legacy.

7) Assessment of financial penalties for service deficiencies

SSROC welcomes the AER adoption of service levels defined in the NSW Public Lighting Code. However, as noted by the AER, at present, with a voluntary NSW Public Lighting Code, there are no meaningful commercial or regulatory consequences of any failures to achieve service levels. Prior to approving any increase in pricing or reductions in service levels, further consideration is urgently needed of appropriate financial penalty mechanisms.

On 14 Dec 2005, EnergyAustralia wrote to DWE to confirm that, "EnergyAustralia is committed to meeting all the minimum service standards and the other requirements in the NSW Public Lighting Code, including the 8 day average repair time service standard. I can also confirm that subject to no additional public lighting regulatory obligations or any unforeseen increase in our cost structure, our current IPART approved pricing arrangements will provide EnergyAustralia with sufficient revenue to recover the costs of providing our public lighting services, including meeting the requirements of the Code."⁶

Notably:

⁵ EnergyAustralia's Submission to Independent Pricing and Regulatory Tribunal, "EnergyAustralia's Revised Public Lighting Proposal," June 2005, p. 11.

⁶ Email from Peter Birk of EnergyAustralia to the Deputy Director General of DWE with copy to Geoff Lilliss of EnergyAustralia on 14 Dec 2005. This email was shared by DWE with the NSW LGSA and Councils as evidence that EnergyAustralia agreed to adhere to the Code in its entirety.

- As per numerous Council submissions to the 2007 DWE review of the NSW Public Lighting Code, Councils have experienced widespread non-compliance with key Code elements in recent years.
- EnergyAustralia has outlined in Part II, Section 7 p200 of its Regulatory Proposal a list of Public Lighting Code aspects that it will not be able to meet even several years after inception:
 - *The development and deployment of EnergyAustralia's new inventory and billing system to a reasonable standard;*
 - *Additional resources to meet timeframes as set for minor capital works;*
 - *Expenditures related to repair of public lights in priority cases 'quickly' as a minimum service standard;*
 - *New systems, resources and processes to record, communicate to customers and achieve timeframes for network supply faults (minimum service standard);*
 - *Costs associated with performance monitoring and reporting of network supply faults (minimum service standard);*
 - *Introduction of systems, resources and processes to record and achieve 'revised timeframes' in circumstances such as severe weather conditions, large scale power outages, accessibility to a few remote locations and high risk situations where public safety and restorations of power receives priority (minimum service standard and guaranteed service level);*
 - *Resources to evaluate new technologies, technical analysis, field study, reviews of public lighting customer considerations and audits of public lighting assets; and*
 - *There is no provision for large scale replacement of existing lights with energy efficient lights other than the planned replacement mentioned in Section A (3).*

8) Financial penalty for misinvestment in inappropriate lighting assets

EnergyAustralia has inappropriately installed tens of thousands of 80W MV lights since 2004, and an unknown number of high wattage mercury vapour lights on main roads without Council support or in direct opposition to previous agreements. EA has a legacy of poor technology choice that continues to impose significant costs on Councils. Where EnergyAustralia has made inappropriate technology selections, given inappropriate advice to Councils or continued practices in the field that management had agreed to halt, their needs to be financial consequences for EnergyAustralia or clear recourse for Councils. Three notable examples are:

- EnergyAustralia continued installation of TF2*20, fifteen years beyond the time at which those were recognised by other utilities to have become technically obsolete. With high equipment failure rates, these lights continue to impose a considerable direct cost for maintenance. EnergyAustralia discontinued installing new TF2*20 lights in 2004, only after intensive and ongoing requests from Councils. However, Councils continue to pay for these poorly performing lights, with EA's maintenance costs passed through in current pricing.
- Although EnergyAustralia has discontinued installing TF2*20s, it has undertaken another poor technology choice which, if not remedied, will impose a cost and greenhouse burden on councils for the coming decades. In particular, EA has undertaken, without council support, to rapidly install 80W MV lights. These lights became the standard and best practice in the 1980s, but are now being made technically obsolete by energy efficient T5 and CFL street lighting that delivers excellent illumination but with a fraction of the energy use. The current pricing framework provides no meaningful recourse for councils to contest EnergyAustralia's deployment of 80W MV lights. Notably, as discussed above, EnergyAustralia has adopted pricing for energy efficient lights that is far higher than indicated by cost analyses and by benchmarking against other utilities.
- Apparent continuation of installations of 250W, 400W and 700W high wattage mercury vapour lighting on main roads from 2004-2008, despite agreement with councils in 2004/05 to cease their use (as documented in Section 3.1 of Wilson Cook's report to IPART during the last major pricing review⁷). These lights use approximately 35% more energy than their modern equivalents, imposing a continuing burden on councils and the environment over their expected life of 20 years.

9) Network Distribution Charges

EnergyAustralia aims for 99.999% reliability on its network⁸. For the 2009-2014 regulatory period, EnergyAustralia has sighted rapid load growth and the need for enhanced reliability as key drivers of very significant capital expenditure. EnergyAustralia has proposed significant consequent increases in network distribution charges for public lighting of more than 90% over the regulatory period. However, key differences in the characteristics of public lighting assets suggest that this may be inappropriate:

- The number of public lighting assets on EnergyAustralia's network only grows by 0.5%/yr⁹ and, based on proposed default lighting choices, there will actually be negative load growth from public lighting over the regulatory period.
- While EnergyAustralia aims for high reliability on its network, network availability and in-service performance of public lighting is held to a much lower standard. The NSW Public Lighting Code cites the need to maintain the in-service values of the Australia Standard AS/NZ1158 which sets a minimum 95% availability at any given point.
- Under the enabling Act, Regulation and Public Lighting Code, there are no meaningful current penalties, reporting requirements or apparent consequence for sustained power supply outages to public lighting or sustained lighting outages from any cause.

In this context it is inappropriate for public lighting customers to cross subsidise the reinforcement of the network for reliability well beyond the levels being met or proposed to be met for public lighting and to cross subsidise capital expenses associated with load growth that is not attributable to public lighting.

SSROC welcomes further discussion with the AER about any of these items as well as matters raised in previously submitted documents.

Yours sincerely,



David Lewis
General Manager
SSROC

CC: *Cr Genia McCaffery, President, Local Government Association*
Richard Connors – Senior Policy Officer – Roads & Transport, LGSA
Dominic Johnson – Executive Director, NSROC
Leta Webb – Executive Director, SHOROC
CEO - Hunter Councils
SLI Program Councils:

The Council of the Municipality of Ashfield	Kogarah Municipal Council	Rockdale City Council
Bankstown City Council	Ku-ring-gai Council	Ryde City Council
The Council of the City of Botany Bay	Lake Macquarie City Council	Singleton Shire Council
Burwood Council	Lane Cove Municipal Council	Strathfield Municipal Council
City of Canada Bay Council	Leichhardt Municipal Council	Sutherland Shire Council
Canterbury City Council	Marrickville Council	Warringah Council
Cessnock City Council	Mosman Municipal Council	Waverley Council
Council of the City of Sydney	Newcastle City Council	Willoughby City Council
Gosford City Council	North Sydney Council	Woollahra Municipal Council
The Council of the Shire of Hornsby	Pittwater Council	Wyong Shire Council
The Council of the Municipality of Hunters Hill	Port Stephens Council	
Hurstville City Council	Randwick City Council	

⁸ EnergyAustralia presentation to AER Forum 30 July 2009

⁹ Based on comparison of EnergyAustralia inventory summaries provided in 2004 and 2007