13 February 2015

Mr Warwick Anderson (sent via email to NSWACTelectricity@aer.gov.au)
General Manager – Networks Branch
Australian Energy Regulator
GPO Box 3131
CANBERRA ACT 2601

Dear Mr Anderson

RE: Ausgrid's Revised Public Lighting Pricing Proposal 2014-19

Thank you for the opportunity to comment on the public lighting aspects of Ausgrid's Revised Regulatory Proposal for 2014 -19. SSROC makes this submission in its roll of managing a Street Lighting Improvement Program on behalf of 35 councils served by Ausgrid in metropolitan Sydney, the Central Coast and the Hunter. These councils encompass approximately 95% of all the 250,000 street lights in Ausgrid's distribution area and about 40% of all the street lighting in NSW.

Overall, councils strongly support the AER's Draft Decision and in particular the robust application of benchmarking data from other utilities. However, councils note that Ausgrid has in large part rejected the AER's draft decision and resubmitted its original public lighting proposal with minor alterations. SSROC's position is that the AER should not accept Ausgrid's claimed street lighting capital and operating costs where they are found to be inefficient compared to reasonable benchmarks.
This submission makes comment on a number of specific items in the AER's Draft Decision and Ausgrid's Revised Proposal.

1. CONFIDENTIALITY CLAIMS

In its Draft Decision, the AER concluded that Ausgrid's confidentiality claims about its public lighting proposals hindered the ability of councils to make informed submissions. In conjunction with the release of revised utility proposals, the AER has authorised a limited form of disclosure of public lighting information whereby documents that the utilities claim confidentiality over will only be provided to public lighting consultants engaged by Regional Organisations of Councils or by councils[1]. Such disclosure would only take place with the acceptance of a confidentiality undertaking and conflict of interest declaration.

[1] https://www.aer.gov.au/node/29628

On careful consideration, SSROC does not intend to ask its consultants, sub-contractors or any of its staff to agree to the confidentiality undertakings requested by the AER for four reasons:

- SSROC does not support establishing a precent that will inevitably result in confidential submissions being made in response to confidential pricing proposals. This is not in keeping with the principles of transparency and accountability for the expenditure of public funds on a public service provided by one public entity to another.
- Councils should not be asked to pay for work by external consultants that they are not ultimately privy to. This would be a particularly troubling precedent given that public funding would be used to pay for any such work.
- As broadly-framed personal undertakings, it does not appear that ROCs or consultants would have insurance arrangements in place that provide adequate coverage for any of their employees asked to sign such documents. SSROC and its consultants would need to take costly specialist legal and insurance advice to address this which is not feasible in the timeframes available. And, it appears unlikely that properly considered legal advice would recommend that any individual sign the type of documents proposed by the AER.
- As per SSROC's submission on confidentiality claims of 28 July 2014[2], councils overall do not believe that the limited disclosure approach to confidentiality meets with the stated intent of the Better Regulation Guidelines, does not fit with recent precedent from other AER pricing decisions, does not facilitate proper benchmarking by councils with street lighting pricing and assumptions in other jurisdictions, compromises councils' ability to understand the basis of pricing and generally undermines confidence in the pricing review process.

This outcome on confidentiality claims is a particularly disappointing aspect of the current pricing review as, yet again, councils are at a significant information disadvantage in this final review with little progress on this issue compared to the 2009 determination.

The release by Ausgrid of heavily redacted, partly functioning pricing models using a wide range of dummy data does not constitute meaningful disclosure, particularly at such a late stage in the review process. As several parties noted during the development of the Better Regulation Guidelines, the timing of the release of information is as important as the content.

2. WHAT'S THE TOTAL COST INCREASE PROPOSED?

In its revised proposal, Ausgrid largely rejected the draft AER decision and has made a number of changes to its original proposal but has not stated the overall proposed total increase in costs for councils or the individual increases for each council. In short, councils can have no clear idea what price increase is proposed for them from 1 July 2015 from the documentation submitted. Councils can only assume that it is close to the overall average 13% + CPI originally proposed by Ausgrid but this is not a robust basis on which to be making comment.

To evaluate the impact of proposed price changes on the material submitted by Ausgrid, councils would need to firstly request 'confidential' pre-09 capital charges for their council and then model post-09 capital and maintenance charges against the Ausgrid inventory of all assets for their LGA. This is frankly a ludicrous expectation of customers.

[2] http://www.aer.gov.au/sites/default/files/SSROC%20-%20Submission%20to%20AER%20on%20Public%20Lighting%20Confidentiality%20Claims%20-%2028%20July%202014.pdf

3. NEED FOR REVIEW OF 'SIMPLIFYING' ASSUMPTIONS

Ausgrid indicated in its original proposal that it proposed moving to a 'simplified' pricing structure that takes 300 prices down to a standard list of 24 prices. Councils are entirely unclear from the original or revised regulatory submissions what simplifying assumptions have been made and whether they are appropriate.

Based on information provided to SSROC, the windfall gains and losses to individual councils that appear to arise from these simplifying assumptions are material and range from +24% to -17% in terms of the proposed step change in pre-09 capital charges for individual councils (and presumably for the associated RAB value and residuals payable on exit from as asset). This large change in charges is material enough that the AER should investigate the changed assumptions proposed by Ausgrid as councils are unable to do so based on the limited information available.

In this context, councils note previous concerns of the AER and utilities in changing the asset valuation approach and/or price setting methodology part way through the life of a regulated asset[3]. When coupled with the large overall increases in maintenance costs proposed by Ausgrid, some individual councils would face dramatic unjustified changes in charges as a result of 'simplifying' assumptions if these are accepted by the AER.

4. STRONG CASE TO REJECT AUSGRID MAINTENANCE ASSUMPTIONS

A key aspect of Ausgrid's revised proposal is the rejection of AER assumptions about the rate of unplanned maintenance tasks associated with each type of lamp and replacement of these with a set of predicted failure rates ranging from 8.26%/yr to 18.91%/yr (Ausgrid Revised Regulatory Proposal – Attachment 8.01 Section 5.2). As outlined in Table 3 of Ausgrid's Attachment 8.01, these predicted failure rates suggest that Ausgrid will be required to undertake some 28,463 unplanned maintenance tasks each year (excluding consideration of LEDs).

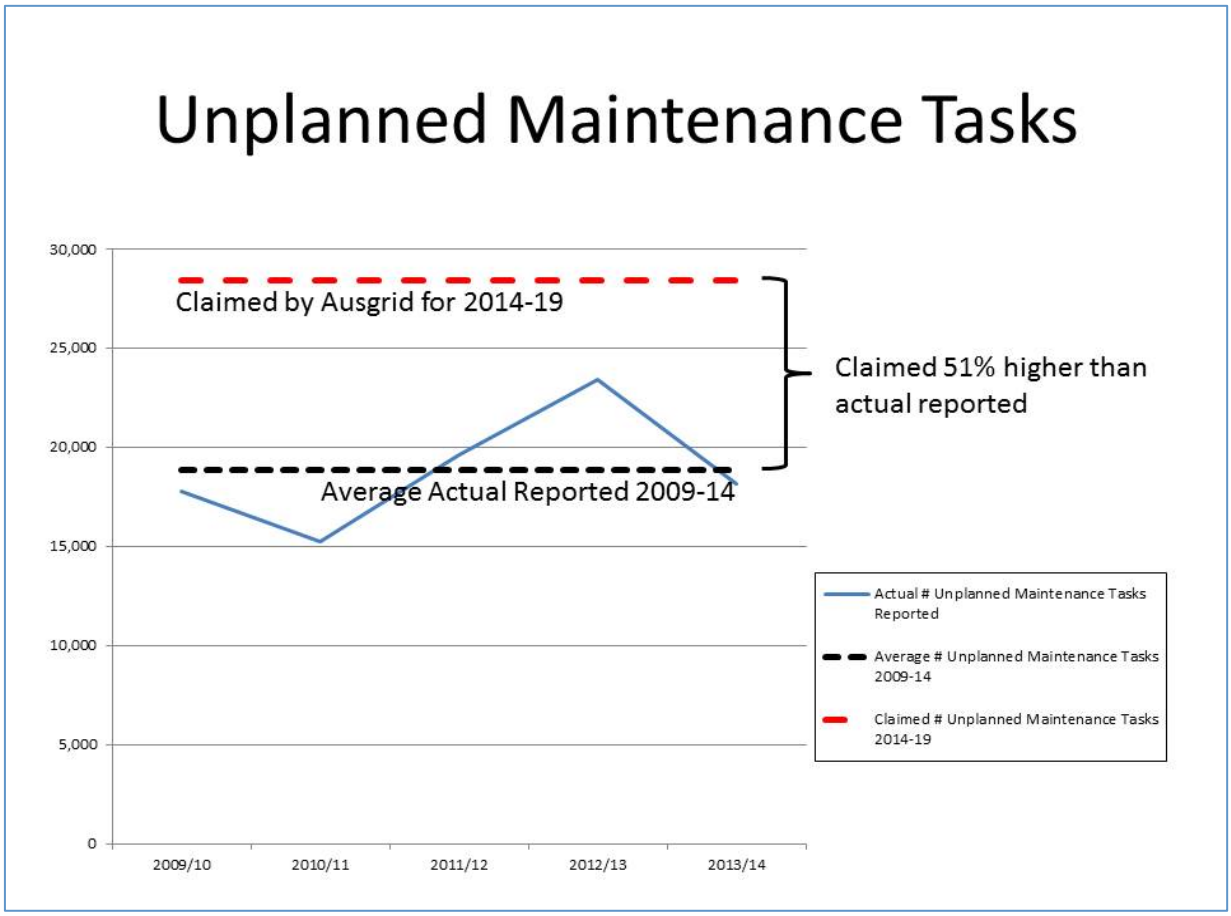
As previously documented with the AER, SSROC has been requesting Ausgrid's public lighting maintenance data on behalf of councils since 2009 but this has not been provided to date. However, even in the absence of this maintenance data, Ausgrid's prediction of unplanned maintenance tasks in its revised regulatory proposal and accompanying models appear unsound and substantially in excess actual reported unplanned street lighting maintenance tasks in the last regulatory period.

As per Table 1 below and the accompanying figure, total average annual unplanned maintenance tasks reported by Ausgrid from 2009- 14 in its annual reports were 18,837 per year. In contrast, Ausgrid's calculated number of unplanned maintenance tasks for 2014-19 is 28,463 or 51% higher than the average reported for the previous regulatory period. Ausgrid's claimed failure rates are so substantially in excess of reported data that Ausgrid's predicted failure rates should be wholly rejected by the AER.

[3] Eg AER Final Decision 2009 p365

TABLE 1: Actual Unplanned Lighting Maintenance Tasks Reported by Ausgrid 2009-14

Year	Reported # Unplanned Maintenance Tasks / Yr	Source
2009/10	17,764	EnergyAustralia Annual Report 2009/10 p20[4]
2010/11	15,251	Ausgrid Annual Report 2010/11 p20[5]
2011/12	19,613	Ausgrid Annual Report 2011/12 p13[6]
2012/13	23,404	Ausgrid Annual Report 2012/13 p16[7]
2013/14	18,154	Ausgrid Annual Report 13/14 p14[8]
Average Yearly Unplanned Maintenance Tasks (2009-2014)	**18,837**	**Exceed Ausgrid's predicted rate of 28,463 unplanned maintenance tasks per year for 2014-19 by 51% compared to average over last regulatory period**



[4] http://www.ausgrid.com.au/~/media/Files/About%20Us/Annual%20reports/EAAR0910.pdf
[5] http://www.ausgrid.com.au/~/media/Files/About%20Us/Annual%20reports/Ausgrid_Annual_Report_2011.pdf
[6] http://www.ausgrid.com.au/~/media/Files/About%20Us/Annual%20reports/Ausgrid_Annual_report_FY1112.pdf
[7] http://www.ausgrid.com.au/~/media/Files/About%20Us/Annual%20reports/AusgridAnnualReportFY1213.pdf
[8] http://www.ausgrid.com.au/~/media/Files/About%20Us/Annual%20reports/Annual%20Report13_14.pdf

The AER should consider whether Ausgrid is double-counting assumed call-outs as a result of including data for unplanned capital replacements (eg spot luminaire replacements at end of economic life should not be included with maintenance data otherwise double-counting would result under both the capex and opex budgets).

Lending further doubt to Ausgrid's claims about its maintenance data are comparisons with predicted failure rates in the previous regulatory reset. As per page 36 of its *Submission for the AER Re-determination of Public Lighting Prices 2010 to 2014*[9], Ausgrid suggested specific lamp failure rates in June 2008 of up to 40.46% and then a subsequent 2010 analysis showed failure rates as low as 1.01%. Ausgrid's latest set of maintenance assumptions is entirely unlike either of these two previous data sets. Indeed, the variance amongst the three data sets is so large that it calls all three data sets into question.

5. NEED FOR REVIEW OF APPARENT DOUBLE-COUNTING IN CFL MAINTENANCE CHARGES

SSROC re-iterates a key question it raised in Section 5 of its original submission[10] about maintenance assumptions specifically related to the large population of 42W CFLs. This issue, while noted in the AER draft determination, has not been addressed by the AER or Ausgrid.

In Ausgrid's Revised Regulatory Proposal it proposes raising the 42W CFL maintenance charge from $48.21 in 2014/15 to $68.06 in 2015/16 (an increase of 41%). However, councils' understanding is that Ausgrid's proposal under the heavily redacted Attachment 8.11 of its original submission is to not provide spot maintenance services to CFL luminaires because CFL luminaires are be replaced with LED luminaires on spot failure. Further, the AER has approved this capital program in its draft decision.

Under this capital replacement program, the specific maintenance charge for 42W CFL luminaires appears to include significant double-counting as councils would be paying for assumed high spot failure rates even though each site visit was also recorded as a capital expenditure including the replacement labour and the cost of the new LED luminaire.

6. TRAVEL AND REPAIR TIMES

Ausgrid's Revised Regulatory Proposal – Attachment 8.01 Section 5.5 on travel times contains largely unsupported statements making specific comment challenging. However, councils note that Ausgrid's travel time assumptions appear to be substantially based on maximum possible travel distances rather than being based on a reasonable assessment of the mean travel time between repairs considering lighting density, average failure rates and efficient maintenance scheduling. Maximum travel distances are not a robust basis for estimating average travel time and the particular assumption that 5% of jobs take three hours of travel time seems highly implausible.

[9] http://www.aer.gov.au/sites/default/files/EnergyAustralia%20Public%20Lighting%20Proposal%207%20January%202010.pdf

[10] http://www.aer.gov.au/sites/default/files/Southern%20Sydney%20Regional%20Organisation%20of%20Councils%20-%20Submission%20on%20public%20lighting%20-%208%20August%202014.pdf

Similarly, councils are not in a position to comment on Ausgrid's time and motion study cited in their revised submission (ID00266 referenced in Section 5.6 of Attachment 8.01) as this has not been made publicly available. However, it is noted that an additional 2 minutes loaded on to average repair times for larger tasks (eg minor capital works) is inappropriate as by definition, minor capital works are capital tasks and should have no bearing on maintenance assumptions.

7. COMPARISON OF AUSGRID LIGHTING PRICES WITH VICTORIA

For the three most common lighting types in Australia, proposed Ausgrid 2015/16 charges for Rate 1 assets (eg including maintenance as well as capital charges for the luminaire and bracket) appear to 58-59% higher than the average Victorian public lighting OMR charges for 2015 (see Table 2 below). Importantly, these common lighting types are highly similar across jurisdictions, largely coming from the same manufacturer and generally being mounted with similar metal brackets to wooden network distribution poles. Large differences in price are therefore particularly hard to support.

TABLE 2: Comparison of 2015 Victorian OMR Charges with Proposed Ausgrid 2015/16 Charges for Most Common Lighting Types

	Powercor[11]	**CitiPower**[12]	**United**[13]	**SP AusNet**[14 15]	**Jemena**[16]	**VIC OMR Average**	**Proposed Ausgrid 2015/16 Charges** (maintenance + luminaire capital charge + bracket charge[17])	**% by which Ausgrid 2015/16 Proposal is Higher than 2015 VIC Average**
S150	$87.39	$117.65	$97.72	$118.51	$100.70	**$104.39**	**$165.23**	**58%**
S250	$90.27	$119.37	$99.64	$117.57	$103.35	**$106.04**	**$167.28**	**58%**
M80	$53.01	$69.07	$64.80	$55.38	$48.83	**$58.22**	**$92.60**	**59%**

In comparing pricing between NSW and Victoria, it is important to also have regards to differences in service levels. Overall, the Victorian Public Lighting Code[18] represents a higher service level than in NSW in key respects. For example, the Victorian Public Lighting Code:

- is a binding DNSP licence condition instead of being voluntary as in NSW;
- requires repairs within a fixed period of 7 business days as compared to a yearly average of 8 business days in NSW;

[11] https://www.citipower.com.au/media/2240/powercor-2015-general-service-charges-pricing-schedule.pdf
[12] https://www.citipower.com.au/media/2237/citipower-2015-general-service-charges-pricing-schedule.pdf
[13] http://www.aer.gov.au/sites/default/files/United%20Energy%20-%20Approved%20annual%20pricing%20proposal%202015.pdf
[14] http://www.ausnetservices.com.au/CA257D1D007678E1/Lookup/Tariffs/$file/AusNet%20Services%20-%20Public%20lighting%20Charges%20inc%20LED-%202015.pdf
[15] Higher of pricing from two different regions used for comparison
[16] http://www.aer.gov.au/sites/default/files/Jemena%20-%20Approved%20annual%20pricing%20proposal%202015_1.pdf
[17] 2.0m default bracket assumed for residential roads and most common T4 bracket assumed for main roads
[18] http://www.esc.vic.gov.au/getattachment/9d34268e-87eb-497f-b28a-e2d6a0e5fd18/RI_FinalPublicLightCodeFollow04ReviewNCM_Apr05.pdf

- makes Victorian utilities liable for a penalty payment to nearby residents if repairs are not completed within 2 business days as compared to 12 days in NSW; and
- has more extensive minimum inventory and reporting requirements than in NSW.

There is therefore a reasonable basis to suggest that NSW public lighting should be provided at a lower cost than Victoria because of the lower service standards applying.

8. STREET LIGHTING SERVICE LEVELS REQUIRE EXPLICIT CLARITY

On page 59 of Attachment 16 of its Draft Decision, the AER has acknowledged the NSW Public Lighting Code. Given statements by NSW DNSPs in revised proposals about potentially reducing service levels if not granted the pricing increases sought, it is essential that the AER specifically state that its pricing approvals are with reference to the service level outlined in the NSW Public Lighting Code and the consequences of not delivering this service level. This would help avoid unilateral and inappropriate reduction of service levels below those assumed in the Code for which councils would otherwise have no recourse. Put simply, pricing must be with reference to a clear set of assumptions about service levels.

Based on information provided by councils and by Ausgrid, SSROC notes current areas of Ausgrid non-compliance with the Code as per Table 3 below.

TABLE 3: Current Ausgrid Non-Compliance with NSW Public Lighting Code

NSW PUBLIC LIGHTING CODE PROVISION	NON-COMPLIANT ASPECTS OF AUSGRID'S SERVICE
7.1 & 7.3 A Maintenance of Underground Supply Faults	Ausgrid does not appear to be meeting the requirements in its own Management Plan, under the NSW Public Lighting Code or in AS/NZS 1158 in dealing with underground supply faults to public lighting. Prolonged underground supply faults are a widespread issue across Ausgrid's network as demonstrated by surveys of main road outages conducted by the Southern Sydney Regional Organisation of Councils in 2012/13 of over 3600 lights across 13 LGAs. These surveys found that 68% of main road outages were from underground supplied lights while these made up only 30% of lights surveyed. Ausgrid's outage rate from overhead supplied lights on main roads was a respectable 1.8% while, in contrast, the outage rate for underground supplied lights was at 9%. Previous SSROC surveys have also shown Ausgrid lighting installations that are underground supplied to have outage rates well in excess of 5% so this is a problem of long-standing. To protect community safety, the road lighting standard, AS/NZS 1158, sets a maximum outage rate of 5% in AS/NZS 11158 Part 1.2 section 14.5.2. Ausgrid, in its responses to councils, appears to have misinterpreted this as applying to all the lights in a local government area (LGA) as a group and not to each lighting installation. Ausgrid's interpretation is inappropriate as the Standard is aimed at designing and maintaining safe lighting installations along individual roadways and makes no reference to populations of lights across an entire LGA.

	In Section 10.0 of Ausgrid's Public Lighting Management Plan, it states that, *"Ausgrid will operate the Public Lighting Network, efficiently and effectively over the economic life in accordance with 'in-service' values specified for 'Category V' and 'Category P' lighting detailed in AS/NZS1158 series of standards pertaining to the lighting of roads and public spaces."* With respect to groups of underground supplied lights and the failure to address supply faults in a reasonable timeframe, SSROC does not believe that Ausgrid is meeting the requirements in its own Management Plan, under the NSW Public Lighting Code or under any reasonable interpretation of AS/NZS 1158.
7.3 A Night Patrols	With regards to Ausgrid's outage detection program, AS/NZS 1158 states in AS/NZS 1158 Part 1.2 Section 14.5.2 that *"…inspection patrols or other detection methods will be required for lighting installations on major roads (i.e. Category V lighting)."* Ausgrid is providing quarterly night patrols on "major traffic roads" but not for all main roads with Category V lighting. There does not appear to be any solid basis for the current Ausgrid approach and those roads selected for patrols are unclear to councils. Night patrols of all main roads are quite reasonably mandated under AS/NZS 1158 because these roads, in contrast to residential roads, usually have no natural reporting party (e.g. adjacent residents) to make fault reports. Again, this is a material community safety issue as the greatest risk of injury and death is on Category V roads where the highest traffic volumes and speed are.
7.3 F & G Maintenance Reporting System	As per Section 5 of SSROC's original submission, it appears that Ausgrid did not implement a robust street lighting maintenance reporting system until 2012, some six years after being required by the NSW Public Lighting Code under Section 7.3 items F and G. This appears to have resulted in material misinvestment in up to 50,000 CFL luminaires over five years that, for unknown technical reasons, performed very poorly on the Ausgrid network.
9.1 Reporting	As per Section 5 of SSROC's original submission, Ausgrid has not met the information disclosure requirements of Section 9.1 of the Public Lighting Code by failing to disclose street lighting maintenance data to councils which is reasonably required by councils as they ultimately must choose which luminaires to accept as Standard Luminaires and maintenance costs are one of the single largest components of total street lighting costs. Early identification of maintenance issues also has material safety implications.
10 Minor Capital Works	Councils indicate that they are experiencing lengthy delays in completing minor capital works involving street lighting, often with major implications for other associated public works.
11.2b Minimum Service Standards	As per Ausgrid's Annual Performance Reports provided to councils in August 2014 and the summary provided by SSROC to the AER on 12 November 2014, Ausgrid is not meeting the 8 day average repair time in at least 9 of 35 LGAs.

11.2c Minimum Service Standards	Ausgrid is not meeting its obligations under Section 11.2 c to keep councils and the Road Authority (where they are not one and the same) on the timeframe for repairs of network supply faults affecting multiple lights. Underground supplied street lighting is most commonly found on main roads where average vehicle speeds are greater, traffic volumes are larger and the risk of injury and death from traffic accidents it at its highest. Underground supplies for street lighting typically feed a number of lights and hence, supply failure usually results in multiple lighting outages which are a significant public safety hazard.

Ausgrid's statement in Attachment 8.01 of its original submission that, *"Ausgrid will be working towards meeting the targets of the Code throughout the 2014-19 regulatory period"* is inappropriate more than eight years after the implementation of a Code which it agreed with councils and the then Department of Energy Utilities and Sustainability in writing that it would implement in full.

As per the comments above, the AER should specifically state in its Final Decision that its pricing approvals are for the service level outlined in the NSW Public Lighting Code and establish financial consequences for non-compliance with the assumed minimum service levels.

9. ADDITIONAL REPORTING REQUIREMENTS NEEDED

For two service issues noted above with clear public safety ramifications, the AER should also specifically require additional DNSP reporting. Specifically:

I. **UNDERGROUND SUPPLY FAULTS** - Underground supply faults to street lights are inappropriately excluded from the key measure of electricity network reliability, the Service Target Performance Improvement Scheme (STPIS), from performance measures in the NSW Public Lighting Code and Ausgrid's measurements of street lighting faults in annual performance reports to councils. As per SSROC's submission to the AER of 12 February 2009[19], this is an issue of long-standing. Without measurement, reporting or financial consequence, it appears highly unlikely that this issue will improve. In view of the public safety implications of the multiple outages typically caused by a supply fault, the AER should consider what tools it has available to mandate reporting of underground supply faults to street lights (including location, number of lights involved and duration).

II. **MAINTENANCE DATA –** Disclosure of street lighting maintenance data to councils is reasonably required by councils as maintenance costs are one of the single largest components of total street lighting costs and help inform technology choice. Additionally, maintenance data also plays a vital role in the early identification of maintenance issues with particular lighting types. High levels of failure in a particular lighting type have material community safety implications.

[19] http://www.aer.gov.au/sites/default/files/SSROC%20-%20submission%20on%20public%20lighting%20draft%20decision%20-%2012%20February%202009.pdf

10. NEED FOR REVIEW OF CLAIMED RAB VALUES

SSROC re-iterates key questions it raised in Sections 2-4 of its original submission[20] about the need to review Ausgrid's claimed street lighting RAB values. In summary:

- Ausgrid has one the of highest RAB values claimed for its public lighting assets yet, still has the largest remaining population of obsolete high wattage mercury vapour lights on main roads, the largest remaining population of obsolete TF2*20 luminaires and a variety of other obsolete legacy technologies that other utilities and public lighting owners stopped using up to three decades ago.
- Street lighting is in a period of unprecedented technological change as old analogue lighting technologies are being rapidly supplanted by LED lighting around the world. Obsolescence and changes in technology are valid considerations under NSW ODRC guidelines in reconsidering the valuation of electricity distribution assets. Such revaluations are already occurring in other jurisdictions particularly in the US.
- When the AER did consider the RAB value of Ausgrid's street lighting assets in 2009, it proposed a substantial write-down. While this was overturned on appeal to the Australian Competition Tribunal, it was not the merits of the write-down that were overturned but the power of the AER to make this change under the transitional rules that applied at the time that were found to be lacking. Different rules now apply.
- Neither IPART (under its 'light-handed' approach in previous decisions) nor the AER (following the Australian Competition Tribunal decision of 2010 under transitional pricing rules) have been free to properly consider the fair value of historic Ausgrid street lighting assets at any point during past determinations.
- The RAB has important implications in the context of the proposed privatisation of Ausgrid as locking in an incorrectly high RAB value at sale would likely crystallise this and reduce the ability of councils to migrate to energy efficient lighting as well as lead to higher future charges.
- With specific reference to that component of the RAB relating to TF2*20 luminaires, as per previous SSROC submissions[21], Ausgrid's continued use of highly obsolete TF2*20 luminaires for up to 20 years after they had been discontinued by other utilities was a material case of misinvestment. These luminaires never complied with AS/NZS 1158 Part 3.1 (or its predecessors) over more than 30-40m and hence never achieved compliance with any version of the standard given average lighting spacings on residential roads at roughly double this amount[22]. Ausgrid failed, with regards to this technology, in its responsibility to ensure that street lighting technology practices were reasonably efficient and effective over a very long period of time from the mid-1980s when demonstrably superior technologies emerged and were widely adopted. Ausgrid did not stop installing new but by then highly obsolete, poorly performing and unreliable TF2*20 technology until July 2004.

[20] http://www.aer.gov.au/sites/default/files/Southern%20Sydney%20Regional%20Organisation%20of%20Councils%20-%20Submission%20on%20public%20lighting%20-%208%20August%202014.pdf

[21] http://www.aer.gov.au/sites/default/files/SSROC%20submission%2011%20March%202010.pdf

[22] SSROC notes that Ausgrid comments with respect to 3 vs 4 year Bulk Lamp Replacement cycles are in error in this context as TF2*20s would not comply with AS/NZS 1158 requirements in any circumstance

- The AER has agreed in its Draft Decision to support Ausgrid's proposal in Attachment 8.10 of its proposal to replace its remaining population of over 22,668 TF2*20 lights with LEDs. Neither the AER nor Ausgrid have clarified the implications on the pre-2009 RAB of this decision. In proposals to council General Managers after the 2010 public lighting pricing redetermination (see sample letter in Appendix 1 of SSROC's original submission), Ausgrid agreed to replace all remaining TF2*20 luminaires and waive any residual amounts owing. Ausgrid said that, *"This is a collective write off of about $12.3 million across the remaining TF2*20 luminaires*". These proposals[23] were accepted in writing by all councils that Ausgrid serves. Recognising the extraordinary obsolescence of the TF2*20 luminaires and that an offer to accept their replacement in conjunction with a write-down of the RAB value, was accepted by all councils that Ausgrid serves, a RAB adjustment should accompany this proposed replacement program.
- With specific reference to that component of the RAB relating to decorative lighting In Ausgrid's Regulatory Proposal – Attachment 8.03, it proposes to no longer offer decorative lighting types, no longer provide any replacement decorative luminaires for existing installations nor purchase any further replacement spare parts once current stocks are exhausted. There are currently about 4000 decorative luminaires on Ausgrid's network which councils understand have a claimed RAB value of several million dollars though this is unstated in the Regulatory Proposal or Revised Proposal.

  As per Section Section 4 of SSROC's original submission, this decision by Ausgrid is effectively one to exit parks and reserves as well as other decorative lighting installations on streets. Reconsideration of the RAB in this circumstance is essential is the RAB is part of a pricing methodology applying to the provision of an on-going service, not an exit situation.

  Councils' contention is that if Ausgrid has made a decision to exit decorative lighting, it should absorb the write down of the RAB value for these assets or make a revised proposal in line with the age, obsolescence and the condition of the assets. Councils also noted the significant consequential financial costs of a decision to exit such installations as they would likely have to rebuild the lighting installations in their entirety.

In view of the above, the AER should carefully consider what scope it has to review Ausgrid's claimed RAB value prior to finalising this determination.

11. NEED TO CONSIDER NETWORKS NSW TENDER OUTCOMES

On 10 February 2015, the three NSW distributors released a joint street lighting equipment tender under their Networks NSW joint venture[24]. With a combined portfolio of about 600,000 luminaires across Ausgrid, Endeavour Energy and Essential Energy, a normal replacement rate of 5% per annum and several large scale accelerated replacement programs planned, the Networks NSW tender will be globally significant.

In view of this multi-year tender, there are four reasons as to why currently assumed capital costs in NSW DNSP submissions may be inappropriate and in need of substantial revision before new pricing takes effect on 1 July 2015:

[23] Consisting of letters to council General Managers of 27 July 2010, 16 August 2010, 8 September 2010 and 15 October 2010 samples of which are available on request

[24] https://www.tenderlink.com/networksnsw/

1. Networks NSW has indicated that residential road LED purchasing volumes across the three DNSPs are expected to be 25,000 per year which represents a purchasing volume of an internationally significant scale. Prices for LED street lighting luminaires in particular have fallen dramatically in recent years. Internationally, the price of LED street lighting luminaires dropped by broadly 50% in the four years to 2013[25]. LED luminaire prices in the US at less than US$150 per residential road luminaire appear to now be directly comparable to those of traditional luminaires[26] [27]. Based on SSROC discussions with international lighting suppliers, there is every reason to believe that Networks NSW will attract internationally competitive pricing for LED luminaires and other street lighting components. Current capital cost assumptions in Ausgrid's revised proposal, which appear to be substantially higher than international benchmarks, may have little relevance after this tender is complete.

2. While a break from the norm in the price modelling approach under the AER, the determination should to take into consideration the likelihood of declining capital cost inputs through the course of the regulatory period. Fixing pricing based on 2015 costs may lead to over-recovery, inappropriate price signals and slower than warranted adoption of new energy-efficient lighting. Ausgrid's current proposal suggests high assumed capital costs for LEDs (probably in the $280-$300 range) and CPI increases on these cost each year thereafter.

3. The scale of the Networks NSW street lighting equipment tender, for all classes of street lighting assets, is without precedent in Australia. As such, lower capital costs, superior performance guarantees and a range of other benefits can reasonably be expected. These cost benefits from greater scale and other efficiencies are precisely the purpose for which Networks NSW was established by the NSW government.

4. On 17 July 2014, Standards Australia rejected proposed changes to the current road lighting luminaire standard, AS/NZS 1158.6, citing insufficient alignment with international standards and therefore an unreasonable barrier to imported products[28]. The international standard, IED 60598-2-3 is likely to be adopted in place of AS/NZS 1158.6 in the coming weeks. This fundamental change in approach should lower LED luminaire prices through increased competition as even the world's largest lighting suppliers have found it difficult to supply LED street lights to Australia so far. The barrier to trade presented by the current standard appears to partly explain why LED street lights have cost, on average, twice as much in Australia as in the United States to date.

In view of the current Networks NSW tender, the AER should consider how updated capital costs can be reflected in pricing over the coming regulatory period rather than being based on the last Ausgrid tender in 2009.

12. NEED TO CONSIDER MANDATING OPTION OF ALL NEW AND REPLACEMENT ASSETS BEING INSTALLED UNDER RATE 2

In its draft determination, the AER states on page 49 of Attachment 16 that, *"Maintenance of public lighting is not a contestable activity under the Code of practice–contestable works. For public lighting assets owned by a distribution business, like-for-like replacements—either initiated by the distribution business or on request from a customer—and maintenance are not contestable.*

[25] Dr James Broderick, US Dept. of Energy, MSSLC Presentation Sept 2013 http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/brodrick_msslc-phoenix2013.pdf
[26] Ed Ebrahimian, Director City of Los Angeles Bureau of Street Lighting, Sydney presentations March 2014
[27] Edward Smalley, Director Seattle City Light, Sydney presentations March 2014
[28] http://www.standards.org.au/OurOrganisation/News/Documents/AS-NZS%201158%206-SA%20Statement.pdf

Government policy change would be required to make this contestable." This position is supported by Ausgrid in its revised proposal (Section 3 of Attachment 8.01).

In view of this position, SSROC re-iterates that one key step that the AER could take to help promote both lower costs for customers and help prepare for future street lighting contestability is to require Ausgrid to offer councils the option of funding all replacement lighting under Rate 2 arrangements (e.g. council funded but installed by Ausgrid). This would not be incompatible with the AER conclusion that like-for-like replacements are not contestable as Ausgrid would be conducting the work.

At present only new lighting assets (e.g. greenfield lighting assets) in Ausgrid's region can be funded by councils or 3rd parties. If any current Rate 1 assets (e.g. utility-funded) need replacing, they are replaced as Rate 1 assets without councils having the option to fund their replacement. More than 95% of assets on the Ausgrid network are understood to be Rate 1 assets.

Allowing all replacement assets to be council-funded would lower capital costs for councils by about 25-30% compared to the Weighted Average Cost of Capital proposed by Ausgrid for assets it funds. Having an option to fund replacements, as occurs in other jurisdictions, would also cap the amount to be financed at the capital cost of the asset as installed rather than expose councils to the continually escalating revaluation of the asset against a 'modern engineering equivalent' under an ODRC annuity approach. Notably, most Essential Energy and a substantial portion of Endeavour Energy street lighting assets are on Rate 2-type arrangements and generally remain so on replacement.

13. NEED TO REVIEW NETWORK TARIFF EA401

SSROC re-iterates a key question it raised in Section 12 of its original submission[29] about the need for the AER to specifically consider the assumptions behind network distribution tariff EA401 for public lighting.

While Ausgrid aims for very high levels of reliability on its network overall exceeding 99.9%, network availability of public lighting supply is current held to a much lower standard as illustrated by the discussion above about underground supply faults.

The NSW Public Lighting Code cites the need to maintain the in-service values of the Australia Standard AS/NZ 1158 which sets a minimum 95% availability at any given point. However, under the enabling Act, Regulation and Public Lighting Code, there are no current penalties or apparent consequence for sustained power supply outages to public lighting. Indeed, councils are expected to keep paying capital, maintenance, network and energy charges even for lights that have been out for a sustained period of many weeks or months. As such, public lighting supply is clearly held to a much lower reliability standard than other network distribution tariffs. This should be reflected in network distribution tariff EA 401.

[29] http://www.aer.gov.au/sites/default/files/Southern%20Sydney%20Regional%20Organisation%20of%20Councils%20-%20Submission%20on%20public%20lighting%20-%208%20August%202014.pdf

14. NEED TO CONSIDER IMPLICATIONS OF BULK DEPLOYMENT ECONOMICS

Ausgrid has proposed three major bulk luminaire replacement programs to remove up to 44,000 TF2*20s and high wattage mercury vapour lights in the coming regulatory period and an unclear number of defective CFLs. The AER and Ausgrid should consider how the cost savings from large bulk deployment programs can be properly reflected in price setting which currently assume that all replacements are on a spot basis with the associated higher labour costs.

Recent bulk luminaire replacement programs in Los Angeles and Las Vegas have achieved installation rates of 30-45 luminaires per day per crew (e.g. multiples of that assumed by Ausgrid). These are no less safety conscious jurisdictions than Australia. Consideration should be given to how such efficiencies can be reflected in capital cost assumptions.

CONCLUSION

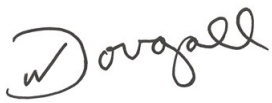
SSROC would be pleased to work further with Ausgrid and the AER on any of the items outlined in this submission. In conclusion however, I wish to re-iterate the view expressed in SSROC's original submission that the AER has a responsibility to make clear representations to the AEMC, COAG and state governments about the extraordinary and growing challenges in administering public lighting effectively under the current regime or lack thereof. The structure of regulation established under the National Electricity Law is wholly inappropriate and incomplete for street lighting based on the reasons outlined on pages 3-4 of SSROC's original submission[30].

Without regulatory reform in this area, the pressure on all parties will continue to increase due to the poor alignment of incentives and lack of a clear governance regime for an essential public service that is in the process of wholesale change.

Precedent from other jurisdictions, particularly in the US, suggests that this situation is not unique to NSW or Australia. After decades of technology stability in street lighting, the dramatic changes being brought about by LEDs, control systems and their inter-relationship with a variety of smart city technology are proving to be a highly disruptive. This is particularly the case where the utilities own the legacy street lights and the alignment of interests with local governments responsible for providing the service is very poor.

Should you have any questions about this submission, please contact me on 02 9330 6455 and n.dougall@ssroc.nsw.gov.au or Graham Mawer on 02 8966 9444 and gmawer@nextenergy.com.au.

Yours sincerely



Namoi Dougall
General Manager
Southern Sydney Regional Organisation of Councils

Cc: SLI Program Councils

[30] http://www.aer.gov.au/sites/default/files/Southern%20Sydney%20Regional%20Organisation%20of%20Councils%20-%20Submission%20on%20public%20lighting%20-%208%20August%202014.pdf