

5 February 2019

Sebastian Roberts
General Manager, Networks
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001
emailed to: NSW2019-24@aer.gov.au

Dear Mr Roberts,

RE: Essential Energy Public Lighting Revised Pricing Proposal 2019 -24

Thank you for the opportunity to comment on Essential Energy's Public Lighting Revised Proposal 2019-2024. REROC makes this submission in its capacity as project manager of the Southern Lights NSW project.

[Southern Lights NSW](#) is a joint initiative of 41 local councils covering almost all of Southern NSW the initiative is working in cooperation with Essential Energy to change the way that street lighting is delivered. Southern Lights aims to replace over 75,500 street lights with state-of-the-art LED lighting and smart controls technology. The councils wish to use these smart street lights and the communications networks associated with the smart controls as enabling infrastructure to support the deployment of other smart city technologies across their jurisdictions. The councils in Southern Lights make up just under half of the 83 LGAs served by Essential Energy and encompass just under half the street lighting provided by Essential Energy to councils. The Southern Lights Project is a joint initiative between [REROC](#), [RAMJO](#), [Central NSW JO](#), [CBRJO](#) and [Broken Hill City Council](#).

The comments in this submission are made on behalf of the participants in the Southern Lights Project and after discussion with Essential Energy about the status of their proposal. In order to prepare an informed response, Essential Energy provided REROC and its advisors with an unredacted copy of its original public lighting pricing model in July 2018 (and a briefing on its model as well as a number of subsequent written clarifications). On 14 December 2018, Essential Energy provided REROC and its advisors with a second unredacted copy of its revised public lighting pricing model along with a number of written clarifications before and after this date.

Following on from its initial submission, Essential Energy entered into a multi-party dialogue on revisions to its public lighting pricing model in conjunction with a number of customer groups and with the AER. REROC, on behalf of Southern Lights Project councils, has engaged in this process over the past months.

Firstly, I would like to acknowledge the significant steps taken by Essential Energy to improve the transparency of its public lighting proposal, most importantly by providing clear proposals and an unredacted, working pricing model for consideration by customers and their advisors for the first time.

Councils acknowledge that this level of disclosure and consultation represents a fundamental departure from previous regulatory periods and offers the potential to significantly improve the relationship that Essential Energy has with lighting customers. It also serves to greatly increase confidence in the outcomes of AER pricing reviews.

REROc notes however, that in other jurisdictions (eg across Victorian DNSPs and with Ausgrid's pricing proposal in this determination), working pricing models are public and have not required confidentiality agreements to be signed and restrictive undertakings agreed to by ROCs/JOs and their advisors. The AER should give consideration to mandating full public disclosure of pricing models for this and future determinations. Essential Energy is a monopoly provider of a public service and consequently we believe that it is in the public interest that these disclosures are in the public domain.

With regards to Essential Energy's revised pricing model, there are many issues on which there is now general agreement amongst the parties. I am therefore writing to comment solely on those of substantive disagreement which are as follows:

1. Benchmarking of proposed Essential Energy tariffs by AER needed

While strongly welcoming Essential Energy's move to componentised pricing, the AER should undertake benchmarking of both Essential Energy capex and opex costs to assess whether the fundamentally new basis of pricing is reasonably efficient for key asset types. REROc notes the following apparent anomalies as examples to consider:

- a. Opex costs for residential road LEDs are up to 90% higher for Essential Energy as compared to those utilities with the greatest LED experience such as Ausgrid, Jemena, AusNet, United Energy, Powercor and CitiPower as illustrated in the table below which shows proposed 2019-2020 opex pricing for 17W LEDs:

Utility	2019-2020 17W LED Opex Pricing
Essential Energy	\$38.21
United Energy	\$20.05
Ausgrid	\$23.80
AusNet	\$24.02
Powercor	\$25.47
Jemena	\$25.55
CitiPower	\$29.06

- b. LED capital costs are 31% - 103% higher for Essential Energy as compared to Ausgrid's revised proposal despite both companies having participated in the same common Networks NSW procurement process. Even allowing for higher Essential Energy installation costs, this cost difference appears particularly high.
- c. Bracket costs are 41% - 121% higher for Essential Energy as compared to Ausgrid's revised 2019-2024 proposal. Again, for substantially identical equipment, this cost difference appears particularly high (See related discussion in Essential Energy Revised Proposal Attachment 13.1 Section 5.2).

2. Inappropriate Application of Historic Failure Rates to LEDs

As per the discussion in Essential Energy's Revised Proposal, Attachment 13.1, Section 3.8, council organisations have questioned the appropriateness of applying historic failure rates of non-LED luminaires to LEDs (eg generalised non-PE cell, non-lamp failures of 4.77%). Southern Lights notes in particular, the following:

- a. Councils have agreed in negotiations with Essential Energy to change the assumed economic life of LEDs to 10 years from the historic 20 years used for legacy luminaire types. The nature of non-PE cell, non-lamp failures experienced over the first 10 years of luminaire life (including with respect to connections, visor issues and seal issues) are likely to differ markedly to the failure modes in the later life of 20-year-old assets; and
- b. LED luminaires have substantially higher IP ratings of optical chambers and gear chambers (or the componentry in them) as well as substantially higher IK ratings (eg vandalism resistance).

Applying assumed average failure rates from legacy luminaire types with different build characteristics, different likely failure modes and double the assumed average life compared to LED luminaires therefore seems entirely inappropriate and highly likely to over-recover maintenance revenue from LEDs. It also creates a perverse disincentive to adopt LEDs by sending an inappropriately high signal about LED opex costs.

Essential Energy has not provided data requested by council organisations to substantiate its claim with respect to this issue.

3. Overheads Too High

One significant underlying contributor to high Essential Energy pricing appears to be a proposal to substantially raise overhead rates to 64% - 69% during the coming regulatory period. Included in this are additional synthetic costs for 'non-system capital recovery' (Revised Proposal Attachment 13.1 Section 5.1). The proposed overhead rates seem markedly in excess of reasonable benchmarks and should be investigated by the AER to see if they reflect efficient operating parameters.

4. Stranded Network Distribution Assets

Southern Lights fully accept the safety reasons cited by Essential Energy for removal of dedicated street lighting control wires (Essential Energy Revised Proposal, Attachment 13.1, Section 3.2). Our concern is about the wholly inappropriate inclusion of these costs as dedicated street lighting costs.

We note specifically that:

- Neither the installation nor replacement of street lighting control wires was funded by councils;
- There have been no specific capex or opex charges historically associated with these assets; and
- These assets are not tracked on council bills nor in council street lighting inventories.

On the basis of the above, councils reasonably view street lighting control wires as part of the standard control network distribution assets for which costs are fully recovered by network distribution charges. Councils would be very concerned if the AER allowed a precedent-setting

decision to shift these network distribution assets into the street lighting basket.

We also note that a similar proposal from Ausgrid to remove obsolete control wires is included as part of their standard control network distribution costs, not under street lighting costs.

Other Issues

Southern Lights notes a number of other issues raised by Essential Energy's revised submission as follows:

5. LED pricing update needed

Essential Energy has not tendered for LEDs since 2014-15 and since then we have seen a period of rapidly declining cost, performance and specification changes. Southern Lights is currently assisting Essential Energy with the technical evaluation of a new LED tender which will be completed well before the start of the next regulatory period. The AER should consider how the expected improved commercial terms of this tender process can be reflected in this pricing process.

6. Council support for faster transition to LEDs

With respect to Essential Energy's planned management of more than 10,000 legacy mercury vapour, low pressure sodium and incandescent lights, it is implausible to suggest that appreciable numbers of these luminaires can continue to remain in service until 2024. While Essential Energy has forecast a progressive decline of these luminaires over the regulatory period to 2024, an appreciable number of each will still be in service at the end of the regulatory period in 2024. However, replacement lamps for each of these categories are already challenging to source (eg because of the Minamata Convention and general ramping down in production of these obsolete lamp types). A revised plan is therefore needed to remove these luminaires in a much timelier fashion. Essential Energy's revised proposal does not address this matter which was previously raised by REROc in its initial submission.

7. Smart Controls

Southern Lights consider that a challenging pricing issue for all parties is the forthcoming adoption of smart controls. Southern Lights has been working with Essential Energy to agree on a specification not only for a smart control system but also on the required communication system that can form the backbone of a smart enabled community. Smart controls offer a variety of installation, asset management and maintenance cost savings but recognising these benefits would require changing a range of opex modelling assumptions. With large-scale smart control, LED installations coming in the 2019-2024 regulatory period, a mechanism to agree on the pricing and cost benefits of smart controls is needed. Southern Lights would be pleased to work with the AER and Essential Energy over the coming months to explore possible solutions that minimise complexity and delay for all parties while sending good pricing signals for important new technology that is being widely adopted overseas.

8. Price Impacts Unclear

Essential Energy has substantially changed the basis of its pricing to a componentised system and also changed and then subsequently revised a large number of pricing assumptions. The net impact of all these changes on customers is not specified in the Revised Proposal nor have REROc or councils been provided with this information despite it being requested (See discussion in Essential Energy Revised Proposal Attachment 13.1 Section 3.12).

It would be nearly impossible, given the complexity, for councils to work out the overall implications of the proposal for an individual council. The AER should require that this is

provided to councils now, prior to a finalised decision, and at a much earlier stage as part of any future pricing proposals.

We look forward to working with Essential Energy staff and with the AER on furthering Essential Energy's 2019-2024 public lighting pricing proposal and welcome further discussions on any of the above points.

Yours sincerely



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Chief Executive Officer

Cc: *David Rowe, CBRJO*
Jenny Bennett, Central NSW JO
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