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Public Lighting Engagement for the 24-29 Regulatory Proposal – Phase 5

Research report prepared for
Essential Energy

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Woolcott Research and Engagement is an Australian privately owned research and engagement agency that provides professional, independent and timely market research and engagement services. Our professional staff arrange, undertake and publish commissioned research and community engagement projects for industry, corporations, governments, integration agencies and individuals.

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1. Executive Summary

1.1 Background

This report outlines the findings from Phase 5 of the Public Lighting Stakeholder Engagement program conducted by Essential Energy. The engagement program for Public Lighting was conducted as a supplementary component of the main engagement program to inform the organisation's Revised Regulatory Proposal for 2024-2029 (Revised Proposal).

For this fifth phase, two meetings took place between Essential Energy, Councils, Joint Organisations (Jos), Regional Organisations of Councils (ROCs) and energy consultants:

1. An online Zoom meeting conducted by Essential Energy on 23 May 2023 - Woolcott Research was present to take notes.

2. A face-to-face Sydney forum conducted on 22-23 August 2023 – Woolcott Research facilitated the first day's session and Essential Energy facilitated the second day which involved taking participants through the model in detail. Woolcott Research were not present on the second day.

This report summarises the findings from the sessions where Woolcott Research was present.

1.2 Main findings

1.2.1 General

Participants praised the level of detail provided during this phase and the opportunity to have direct face-to-face contact with Essential Energy at the Sydney Forum, in order to have issues clarified and questions answered.

Overall, it was felt that the sessions provided a greater level of understanding of streetlighting assets, processes and how pricing works. Essential Energy staff were viewed as having been transparent in how they presented the cost build up in the submission.

However, there were some concerns that it is quite late in the process and whether the feedback provided at the sessions would be used in the Revised Proposal submission.

The section below provides an overview of findings from the sessions.

1.2.2 Items in the Revised Proposal

Glare shields

Overall Councils were positive about the reduced glare shield installation timeframes from 270 days to 60 days.

Annual review of the approved materials list -AML

Councils welcomed the introduction of an annual review of the AML starting in 2024.

Streetlighting reporting tool

The new streetlighting reporting tool was received positively.

Compliance testing of un-metered supply

Councils were supportive about the removal of the $150,000 allocation from the Revised Proposal before lodgement.

Design component for floodlight replacement

Councils would prefer that lighting design is an ancillary network service that councils can use as required for floodlight replacement so were supportive of this being included in the Revised Proposal.

Cleaning and inspection cycles

A six-year LED luminaire cleaning and inspection cycle proposed by Essential Energy in the Regulatory Proposal submission was largely supported.

LED failure rates

Councils thought that the failure rates quoted by Essential Energy seemed appropriate and were happy with using the averaged LED failure rate rather than individual failure rates.

Public lighting and unmetered supplies team

During the course of the phase the number of full time equivalents on the public lighting and unmetered supplies team was reduced from 5.1 to 4.6. This reduction was viewed positively by councils.

Night patrols

Councils supported the continuation of bi-annual night patrols in the absence of smart lighting. They also supported the alignment of OPEX charges for Zhaga and Standard LEDs to encourage the uptake of new technologies.

Weighted average CAPEX method

Little feedback was provided for the Revised Proposal of a blended capital charge for luminaires, brackets and supports. Assuming that prices for materials remain high, then this proposed method will result in less bill shock and charges being more cost-reflective, so councils were not unsupportive at this stage.

Minor Capital Works (MCW)

The introduction of standardised rates was brought up as an issue by a small number of participants. The standard fixed charges were questioned as it was felt that Essential Energy may be adding a large margin. However, there was a reluctance by councils to do it themselves though and use ASPs as they are thought to be costly. The preference was to have another option available as well as the standardised rate.

Labour productivity

Most participants accepted the analysis and assumptions presented on this topic, particularly because the average tasks per truck roll had increased, but a minority of participants still voiced the opinion that the number of jobs per trip seemed quite low at 2.96.

Traffic control charges

This topic was still a point of contention for some. There was a request for Essential Energy to explore ways to cut traffic control costs and look at the definition used to evaluate whether a job needs traffic control. Although there was acceptance that the large geographic areas that Essential Energy covers is challenging for this issue, there was an assumption that in metro areas the need for traffic control would be greater, so costs should be higher for other DNSPs. It was also not clear to councils why Essential Energy requires a greater number of crew members than other DNSPs (if this is the case). This item may have been explored in further detail on day 2 of the Sydney forum.

Cat V pricing

Essential Energy outlined that the key factors driving Cat V pricing were traffic control assumptions and night patrol costs. Participants welcomed the reduction in the assumption of the proportion of Cat V roads that will require traffic control from 80% to 68% but thought that this could be reduced even further (as stated in the previous section). They also questioned the need for three crew rather than two. Again this item may have been discussed further on day two.

Some suggested that the sooner smart lighting is installed the better as it will negate the need for night patrols.

1.2.3 Invoicing and warranties

Generally, councils reported that the current invoices are clear and easy to understand in terms of the layout of charges, however the makeup of charges was thought to be highly complex and difficult to make sense of. There were also some concerns about the accuracy of the asset inventory and detailed billing reports which can lead to long term impacts on prices. Many councils felt that they didn't have the knowledge or time to check them. Overall, there was a call for better quality assurance mechanisms to be built into the billing system to reduce the need for councils to check invoices and to build trust. Ultimately, they believed that smart controllers would solve this issue.

Overall, there was positive feedback on the increase in the warranty acceptance rate. However, participants did not feel that the process for warranties was transparent enough, so it was hard for them to understand the capital charges and work out which warranties have been accepted.

1.2.4 Pricing and overheads

After the explanation provided by Essential Energy on its Cost Allocation Method, there was more understanding and acceptance about why the overheads are higher in the Essential Energy area than other DNSPs. However, there was a desire to understand further the reasons why Ausgrid has moved to a revenue model, and whether that is something that Essential Energy should consider. There was also a call for a consistent CAM across the different NSW DNSPs to enable cost comparisons to be made.

There were also comments made that Essential Energy as a whole business should investigate what cost efficiencies can be made to reduce overheads.

1.2.5 Smart streetlighting

There was a lot of interest by councils in the Bathurst smart lighting trial and the outcomes of that, particularly the cost savings related to dimming and trimming.

There was also strong interest in further information and engagement on this topic, particularly on the benefits for councils (including those smaller councils in more rural areas), the process of installation and how councils should make decision about what smart lighting they might require. There were also some questions around data privacy and ownership and how quickly the technology will become out of date.

1.2.6 Future engagement

Participants were positive about continuing the engagement with Essential Energy and suggested that it should be conducted on an ongoing basis rather than just for the next Regulatory Proposal. Some of the more engaged participants would like to be involved in co-designing the engagement program including the topics to be discussed, questions and methods of engagement.

Overall, they suggested that to reach the largest number of councils a variety of formats should be employed, including meetings with their representative bodies such as Joint Organisations, Regional Organisations of Councils and energy consultants, smaller deep dive workshops for more detailed complex issues and large scale forums for wider education, knowledge sharing and consultation.

1.2.7 Implications

On the whole Essential Energy was seen to have engaged with councils, joint organisations and independent advisors in an interactive and transparent way. The Sydney session was viewed positively by most, as being educational, informative and 'conducted in the right spirit'. Essential Energy were praised for having conducted detailed further data analysis on some issues, providing a thorough explanation of their pricing assumptions and explaining the content of the Regulatory Proposal.

Councils views have resulted in advances in many topics since the beginning of the engagement for the Regulatory Proposal, such as reducing the timeframes for glare shield installation, the Cat V night patrol cycle remaining at two patrols annually, commitment to an annual review of the AML, reduced Zhaga LED OPEX, blended CAPEX charges, traffic control inputs updated and a commitment to explore bringing forward the adoption of smart technologies along with the commencement of the smart lighting pilot in Bathurst.

Some issues have been significantly advanced by further engagement since the submission of the Regulatory Proposal, such as pricing for public lighting failure rates, removal of the design component from the floodlight capex costs and instead providing a fee for service in the Ancillary Network Services (ANS) rates, removing the compliance costs and the revision of the allocation of costs for the Public Lighting team.

Other issues that were considered outstanding, for example overheads, were understood at a deeper level by councils and their representatives during this phase but will require further engagement on an ongoing basis, following submission of the Revised Proposal.

Invoicing and warranties are specific topics that Essential Energy should consider further engagement on. Councils are requesting better quality assurance mechanisms to be built into the billing system to reduce the number of inaccuracies in invoices, which will reduce the need for them to check invoices and will build further trust. They are also asking for a more transparent warranty and capital cost alignment process.

Smart lighting is an area of much interest and opportunity amongst councils and their representatives. Further information should be provided on this topic, particularly on the outcomes of the trial, the benefits for councils including those smaller councils in more rural areas, the process of installation, data privacy and ownership, and assistance for councils regarding decision making about what smart lighting they might want.

Ongoing engagement should be considered for the next Regulatory Proposal rather than Proposal specific engagement. It should be collaborative in nature with an aim to work with councils and their representatives to understand each other's' perspectives and any knowledge gaps or areas of confusion and contention. Where possible it would also be helpful to work with the other DNSPs and the AER to understand the differences in the CAMs, cost allocations and assumptions used in the public lighting models in order to understand where there are opportunities for alignment or sharing of knowledge and best practice.

Future engagement should involve a variety of methods including regular forums/webinars on topics where councils lack knowledge and want further engagement as well as meetings with councils' representative bodies such as Joint Organisations, Regional Organisations of Councils and energy consultants, smaller deep dive workshops for more detailed complex issues and large-scale forums for wider knowledge sharing and consultation. Feedback should be provided after each engagement component on what was heard and how that has been reflected in Essential Energy's proposals and plans.

2. Background, Objectives and Engagement Program

2.1 Background

Essential Energy builds, operates and maintains one of Australia's largest electricity distribution networks, providing electricity to regional, rural, and remote NSW, and parts of southern Queensland. It covers 95 percent of NSW that is 737,000 square kilometres with 183,612 km of powerlines.

As a government owned entity, the business is regulated by the Australian Energy Regulator (AER), and every five years it must present a Regulatory Proposal to the AER which outlines its investment plans, the costs to deliver those plans and the proposed prices that customers will pay. The Regulatory Proposal for 2024-2029 was submitted to the AER in January 2023 with the Revised Proposal due towards the end of 2023.

Essential Energy states that it is committed to placing customers and stakeholders at the centre of everything it does. Therefore, to develop its Regulatory Proposal, the business adopted a comprehensive engagement program to identify customers' needs and priorities.

Essential Energy's approach to engagement for the previous Regulatory Proposal (2019-24) received considerable praise from the AER and customer representative groups, as well as winning the Energy Networks Australia and Energy Consumer Australia (ECA) 2018 award for consumer engagement. In a constantly evolving environment, there is a desire to build on this and do even better for the next one.

Woolcott Research and Engagement, with the assistance of ERM (previously KJA) were commissioned to develop and conduct the customer and stakeholder engagement program for the 2024-29 Regulatory Proposal. Subsequently, in addition to the main engagement program, the business was also commissioned to assist Essential Energy in its public lighting engagement with councils.

2.2 Objectives

The objective of the engagement program as a whole was to ensure the views and expectations of Essential Energy's diverse customer base are accurately and meaningfully reflected in the business's 2024-29 Regulatory Proposal, such that it is capable of acceptance and approval by the AER.

The goals of the whole engagement program were:

- To identify and understand all issues that are important to customers
- To involve customers in decisions that affect them
- To understand their individual perspectives on matters relating to Essential Energy's business
- To distil technical concepts from the electricity industry in a way that can be more easily understood by the public

As an adjunct to the Engagement program, Essential Energy wished to include a dedicated Public Lighting component with Councils and Streetlighting advisors in NSW.

2.2.1 Objectives of the Public Lighting Engagement

Public Lighting services are deemed an alternative control service and are hence regulated by the AER. To help feed into the submission Essential Energy wished to engage public lighting representatives from Councils to obtain input into the key areas of the upcoming Regulatory Proposal.

The fifth phase aimed to close out some of the outstanding issues and provide further information about the content of the Regulatory Proposal and the decisions made.

Specifically, the objectives of the fifth phase were to:

- Improve understanding of public lighting, strategies and pricing.
- Present the Regulatory Proposal, outlining what Essential Energy heard through the engagement process and how decisions had been made on content.
- Provide an opportunity for questions and clarification.
- Provide a final opportunity for feedback to inform the Revised proposal.
- Look at emerging issues in public lighting such as smart lighting.
- Discuss how Councils would like to be engaged going forward.

For interested parties there was also an opportunity to 'deep dive' into the detail of Essential Energy's public lighting model, to explore assumptions and information inputs.

2.3 Public Lighting Engagement Program

The engagement program for Public Lighting has consisted of:

- An online survey of Local Council representatives
- Three phases of online Zoom forums with Local Councils held in April, May, July 2022
- A fourth phase for 'testing the Draft Regulatory Proposal' which involved nine online Zoom meetings conducted in September, October and November 2022.
- A fifth phase conducted in May and August 2023 which involved a Zoom forum and a two day face-to-face meeting in Sydney

2.3.1 Phase 5 Public Lighting Engagement Program

Two meetings were held during Phase 5 that Woolcott Research were present at, with each session attended by various council, JO and ROC representatives as well as Essential Energy experts.

2.3.2 Zoom meeting

The first meeting ran on the online platform Zoom on Tuesday 23 May and included:

- Revisiting timelines, agreed principles and providing updates on actions from previous sessions.
- The Regulatory Proposal, including overhead and labour productivity assumptions.
- LED Luminaire and PE Cell Failure Rates for operating charges.
- LED Floodlights treatment of design component.
- Compliance Testing of Un-metered Supply.
- Night Patrols as a separate charge or incorporated into overall Cat V operating charges.
- Appropriateness of 6 Yearly LED Luminaire cleaning and inspection cycle.

- Size of the public lighting management team.
- New Cat V pricing.

Woolcott Research was present to take notes and the session was also recorded.

2.3.3 Sydney Face-to-Face Forum

Essential Energy held a two-day session in Sydney CBD on 22-23 August 2023. Participants were provided with paid accommodation and travel where requested.

The first day involved a mix of information provision from Essential Energy staff and table discussions. Participants were seated on tables of 6-7 with a Woolcott Research facilitator on each table.

Woolcott Research & Engagement provided a lead facilitator - Ian Woolcott (who chaired the session and managed flow and timing) and four table facilitators. Woolcott facilitators ensured all issues were covered and everyone's views were heard and captured in discussions. Further probing by facilitators into issues that arose within the discussion provided a greater level of detail. A copy of the agenda used by the facilitators for August 22 is in Appendix A.

The session on 22 August involved detailed information provision with a view to improving the understanding of public lighting, strategies and pricing. Following this a summary of what Essential Energy has heard through the engagement process was provided along with how decisions have been made on the content of the Regulatory Proposal. Emerging issues in public lighting such as smart lighting were touched upon with a presentation from Bathurst City Council on the smart lighting pilot. The final session involved a discussion about how councils and their representatives would like to be engaged going forward.

Essential Energy staff presented, observed the discussions throughout the sessions and were on hand to answer any questions that arose. Forum presenters included Andrew Hillsdon, Adele Finch and Hamish Wheatley, with assistance from Deb from Bathurst City Council.

The following councils, Joint Organisations and energy consultants attended the session on the 22 August 2023. Please note that in some cases there was more than one attendee from the same council or organisation.

- Albury City Council
- Bathurst City Council
- Coolamon Shire Council
- Dubbo Regional Council
- Federation Council
- Goulburn Mulwaree Council
- Greater Hume Shire Council
- Inverell Shire Council
- Kempsey Shire Council
- Lockhart Shire Council
- Murray River Council
- Narromine Shire Council
- Orange City Council
- Snowy Monaro Regional Council
- Temora Shire Council

- Tweed Shire Council
- Upper Lachlan Shire Council
- Wentworth Shire Council
- Central West JO
- Riverina JO
- Next Energy

Day two of the Sydney session involved a deep dive into Essential Energy's public lighting model with most of the same attendees as day 1. Woolcott Research were not present for that session.

3. Zoom session findings

Following an introduction by Justin Hillier, Chief Commercial Officer from Essential Energy, and a run through of the agenda for the session, the last remaining 'outstanding items' were outlined and the focus of the session was to provide further information on these topics with a view to answering questions and gaining feedback.

3.1 Failure rate data

Essential Energy explained that the failure rates have decreased by 85% since 2019 when the LED upgrades were adopted.

The business has adopted a blended rate after engagement with councils which helps to share failure risk between councils. The use of luminaires with higher failure rates is reviewed and Essential Energy adjusts its inventory selection as required. The current PE cell failure rate remains 1.09% and the blended luminaire failure rate used in the Regulatory Proposal was 0.64%.

Councils were asked if there were any concerns with the blended approach. Most councils who answered the question reported that they did not have any concerns about this approach (18 of 19 votes).

3.2 Floodlight design

Essential Energy had proposed in the Regulatory Proposal that a design charge would be applied to all floodlight replacements of about ninety dollars. The business wanted to consult with councils about whether they supported this inclusion.

Councils present were asked if they would rather Essential Energy includes a floodlight design service in every floodlight replacement or includes lighting design as an ancillary network service that councils can use as required. The majority of those who answered stated that they would prefer the design component to be an ancillary network service that councils can use if they want to (15 of 24 votes), with a further six councils stating that they did not know and three wanting the design included in every replacement.

3.3 Compliance costs

The next section of the presentation was about compliance testing of the unmetered supply. Essential Energy had interpreted the Public Lighting Code as a new audit requirement that would require the business to independently verify its inventory. Therefore, additional costs had been calculated by the business as $150,000 per annum to allow for this new verification work. This had been presented to councils in earlier engagement.

However, since then, Essential Energy had received legal advice indicating that the business can rely on its existing processes to complete the verification work, thus the cost of $150,000 can be removed from the Revised Proposal before lodgement.

Councils were asked if they were happy to close this item if these costs were removed. Eighteen of the councils who answered the question stated that they were happy to close this item if compliance costs were removed from the Revised Proposal (18 of 24 votes) with a further three stating that they did not know and only one not happy to close the item.

3.4 Night patrols and smart controls

Essential Energy had committed to continue to review and discuss with councils whether the costs of staging night patrols on Cat V roads are best delineated as a separate charge in the pricing model or whether these are best incorporated into the overall Cat V operating charges.

Under the current process these patrols occur twice per annum on every Cat V streetlight which includes a physical inspection and tasks issued for repair where required. For the Proposal for 2024-29 it is proposed that smart technology will automatically detect any lights that are not working so no night patrol will be required for such lights. Therefore any luminaires that are Smart LEDs connected to a network will not incur an additional OPEX charge for night patrol.

Councils were asked if they supported this approach. Twenty of the councils who answered the question stated that they supported the approach outlined (20 of 25 votes), three were not supportive and two did not know.

3.5 Cleaning and inspection cycle

A six-year LED luminaire cleaning and inspection cycle was proposed by Essential Energy in the Regulatory Proposal.

This was based on:

- Requirements within AS1158, as detailed in the Public Lighting Management Plan
- The Australian Standard on light depreciation from dirt and grime over time to ensure lighting levels remain adequate
- 6 years is the maximum allowable time (72 months/6 years) under the Australian Standard for light depreciation to occur
- It also aligns with a trial we have undertaken in Armidale where cleaning resulted in a 20% increase in Lux on the ground
- Our Regulatory Proposal contained a placeholder rate of $55.75 per clean

Participants were informed that this topic was still being discussed internally and a promise was made to keep councils updated.

3.6 Public lighting management team

Essential Energy outlined that there are 5.1 full time equivalent staff and the tasks and services that they provide. These services include:

- Technical input and advice
- Engagement with stakeholders
- Billing and invoicing
- Compliance reporting to IPART, AEMO and the AER
- Market research and tender management
- Coordination of minor capital works and glare shields
- Project management, packaging and scheduling
- Warranty claim management

- Energy savings certificate management
- Manage night patrol, asset testing and cleaning programs
- Data maintenance and reporting
- Defect management

Plans to extend services include the annual review of the AML, facilitating smart lighting trials and improving inventory data.

Essential Energy asked if there were any questions in relation to this – no questions were asked.

3.7 Cat V pricing

This topic has been an area of focus during the engagement program. Essential Energy explained the drivers behind Cat V pricing as being:

- The fact that the business outsources 100% of traffic control.
- There is a minimum spend per job of 4 hours
- There is a high focus on public and employee safety, a low appetite for risk
- Regional areas face regional prices and longer travel times
- Tightened compliance timeframes for defects in the Public Lighting Code means a shorter timeframe so the business cannot always bundle multiple tasks into one truck roll.
- Actual data was used to calculate the percentage of Cat V lights requiring traffic control (current period 80% vs 2024-29 68%) and the number of controllers required for each job (current period - 2 vs 2024-29 - 3).
- Overheads are applied as explained earlier.

There were no questions asked by councils at this stage.

3.8 Next steps

A question was asked at the end of the session – Is there a summary available of what each Council's SLUOS charge will change to as a result of the current proposal before the AER? Essential Energy stated that it might be a possibility to provide that calculation and that they would look into that.

4. Sydney Face to Face Session Findings

4.1 General Findings

Participants praised the level of detail provided at the forum and the opportunity to have direct face-to-face contact with Essential Energy in order to have issues clarified and questions answered.

Overall, it was felt that the session provided a greater level of understanding of streetlighting assets, processes and how pricing works. Essential Energy were viewed as having been transparent in how they presented their cost build up.

> *"Great to have face to face contact and Essential Energy staff to ask/answer questions."*
>
> *"The level of detail provided and explanation of public lighting (was a strength of the session)."*
>
> *"The smart lighting section was very informative. I would like to be informed of future developments in this area, if this can reduce the energy cost."*
>
> *"The opportunity to provide feedback. The session was conducted in the right spirit. Willingness by Essential Energy to share data and insights."*
>
> *"Lots of valuable information provided which improved understanding of the reg proposal and underlying assumptions."*
>
> *"Two-way communication. Essential Energy were very willing to listen and take feedback. Lots of information was provided."*

There were some concerns about the timing of the session within the engagement program and whether the feedback provided would be used in the Revised Proposal.

4.2 Topics and questions raised

After an introduction from Essential Energy and around tables, the first section of the forum involved a table session about whether there were any topics or questions that participants wanted to discuss at the forum. The following were raised initially:

- Smart lighting – participants wanted to know more about what they can expect in the future from smart lighting and how Essential Energy is planning to roll that out.
- Understanding the pricing model in comparison to other distributors (why they are so different) and the expected charges in the next regulatory period. There was disappointment from some that the expected cost savings from the LED rollout hasn't yet materialised (or may be negated by expected price increases generally).
- Some councils said they just don't have the knowledge and resources to deal with public lighting – this was not limited to only the smaller councils. They feel that they lack the knowledge to specify the luminaires they want or understand the asset inventory/billing reports.
- Some errors were noted in the asset inventory/detailed billing reports.

- Understanding minor capital works charges and whether there is an option for councils to pay up front.

- Essential Energy staff turnover/lack of continuity - leading to a feeling that decisions that have been made haven't been acted on over the years, or there have been significant changes in direction due to staff turnover.

- In a few cases Essential Energy were thought to be hard to contact with few direct email addresses/phone numbers offered, along with variable customer service and relationship management.

Most of these issues were focused on in the forum.

4.3 Understanding Pricing and Invoices

Following the introduction, Essential Energy provided a detailed overview of the Public Lighting assets and services, the public lighting and unmetered supplies team and an overview of the regulatory framework including the public lighting codes, Australian Standards, AEMO and AER.

The next part of the forum involved a deep dive into public lighting charges and costs including a refresher on how Streetlight Use of System (SLUOS) billing works, key cost drivers, costs associated with the content of the regulatory proposal, proposed weighted CAPEX method and overheads and support costs.

It was explained that from 1 July 2019, Essential Energy commenced component-based billing which is billing by itemised streetlight components – Support, Bracket and Luminaire. The new invoices to Councils detailed itemised capital and maintenance charges for each component. Each month Essential Energy also provides an updated copy of the Streetlighting Customer Inventory, Detailed Billing Report and Detailed Billing Report Instructions.

This part of the agenda was an interactive session - participants were given their specific Council's invoice so they could refer to it whilst Essential Energy presented, then they were asked for feedback on the clarity of the invoices and asset inventory/detailed billing report.

In the discussion sessions Councils reported that the current invoices were generally felt to be clear and easy to understand. However, the makeup of the charges on the invoice was thought to be highly complex – what is behind those numbers isn't easy to understand and is therefore virtually impossible for councils to challenge.

> *"This is straightforward (the invoice) but I feel like there is more information needed. You can't validate what you're actually paying for. How do you know what is actually included in this cost?"*

> *"On the face it is easy to understand but in reality, it is not really enough information to pay this and know that what we are paying is correct."*

There was distrust by some councils in relation to the accuracy of the asset inventory and detailed billing reports. It was thought to be difficult to pick up any inaccuracies and what's more, any inaccuracies are thought to have long standing impacts as they remain there for many years, so councils pay costs associated with them for many years.

> *"Many of the new capital charges are inappropriately misallocated. You need to have constant attention otherwise they remain there for years."*

"They're probably making money on little charges."

Most councils stated that they don't have the time or knowhow to check them, so they just pay the invoice without checking it.

"Invoices just started coming through to me. I had no idea what I was looking at. Sometimes I'm overwhelmed by all the spreadsheets."

"I reckon we'd get it and just pay; we don't know what they mean. We're a small Council, we don't have the time or resources to be checking this thoroughly."

Recently Bathurst Council has identified a number of inaccuracies on their bills which have been communicated to the Southern Lights group of councils. The kinds of inaccuracies highlighted at the session were things like the wrong luminaire or replacing the pole but saying that the luminaire has also been replaced. This has caused other councils to question whether their bills are accurate and has created further distrust amongst councils towards Essential Energy.

"Deb (Bathurst) is finding 10-15 errors per month. We calculated that over the long term it accumulates a lot over 10 years.

"We are fortunate to go to Deb in our group. We all need a Deb. We are doing a million things so we haven't time to go through the Essential Energy bills. We have asked her to do a seminar on it so we can learn how she does it."

Overall, there was a call for better quality assurance mechanisms and processes to be built into the billing system along with a simpler inventory/billing report.

"I'm really interested in an inventory. People within Councils are managing different pieces of the pie. There needs to be better quality assurance systems in place."

"Paying your bill is a leap of faith. If they had quality assurance it would give us more confidence."

Some thought that it is up to councils to find a way to check the invoices – e.g. sending it to a subject matter expert within council, along with the detailed billing report, before it is paid by accounts.

It was mentioned that smart controllers would solve this problem.

4.3.1 Warranties

Warranties were also raised as an issue at this point as their inclusion on the bill about whether a failure has been covered by warranty or charged as a capital cost is unclear.

"If it was replaced, in the description it's capital only, that's if it was under warranty or not. It shouldn't be on the bill at all if it's warranty."

The whole process for warranty claims was thought to be overly complex, hard for councils to follow and therefore check up on.

"Essential has gone out to change it (a new LED failure) but what is our mechanism to check whether it is a warranty claim or it has gone into capital? The people in the truck have too many options for how they allocate the works. Is it warranty or not and which period of the warranty it falls into. There

are too many baskets for the field team to choose from. It is too complex and time consuming to try to work it out."

Some voiced a lack of trust that Essential Energy is focused on chasing up the warranty with the provider on behalf of councils, as there is seen to be no incentive for them to do so. The risk was thought to be with councils, unlike for other DNSPs, where the warranty process is not seen to expose the Council to the same level of risk. An example was provided for councils in the Ausgrid network area where they are provided with an 'all in' price and therefore are not exposed to warranty claims as it is built into the capital tariff.

"The challenge I have at the highest level is that there is a conflict of interest. Councils have no control over the warranties. There is no incentive for Essential Energy to chase the warranties. If they don't get it from the manufacturer then then they get it from the Council. There is no risk to them. The risk should lay with Essential Energy rather than the Council. They have de-risked themselves from the process."

At the end of this section Essential Energy presented how their Regulatory Proposal will impact OPEX and capex charges. Firstly, an explanation was provided for how OPEX charges are built up (cleaning/inspection costs + traffic control + field labour, fleet and materials + failure rates + night patrol + overheads), then a comparison of approved and proposed OPEX was provided along with examples. OPEX is expected to be lower over the 2024-29 period than it was between 2019-24.

Next a breakdown was provided of how capital charges are built up (materials costs + field labour and fleet + failure rates + traffic control + overheads) as well as a comparison of approved and proposed capex along with examples. CAPEX is also expected to be lower over the 2024-29 period than it was between 2019-24.

Essential Energy is proposing to introduce a blended capital charge for luminaires and supports. The cost of construction has increased significantly with the cost of certain materials such as steel skyrocketing over recent times. It was stated that blending the current period's capital charges with the forecasted costs & volumes into the next regulatory period would mean charges are more cost reflective and balanced.

4.4 Understanding the Regulatory Proposal

Essential Energy presented a summary of the public lighting engagement program, what they had heard during the program including the key findings from the survey, and what was included in the Regulatory Proposal.

During the discussions it was clear that many councils felt that Essential Energy had listened to their feedback and in the main acted on it in their submission to the Regulator. The level of detail provided for this section, and throughout the forum, was also praised by participants.

"I think this shows they are listening and making some changes – that is good."

"The first time we came to these things we got none of this detail. This forum is much better with the level of detail provided. They have answered all the questions we had today which shows they are invested, and they know what they are doing. They know their stuff."

Participants were satisfied with how Essential Energy has responded to what they had heard for most of the topic areas, e.g. glare shields, compliance testing costs of unmetered supply, floodlight design component, streetlighting reporting tool and the annual review of the approved materials list. However, assumptions were questioned by a couple for the weighted average CAPEX method such as whether the cost of materials may actually come down over the 5-year period.

Since the lodgement of the Proposal some items have been under ongoing review with the Southern Lights. Some of these items did generate more discussion and some issues were raised about those (outlined below).

4.4.1 Minor Capital Works

Essential Energy explained that councils can request Essential Energy to install extra streetlights onto the network through the existing Minor Capital Works (MCW) process. Councils can engage Accredited Service Providers (ASPs) to complete this work if they wish. Essential Energy has developed standardised rates for MCW as part of the Regulatory Proposal.

During the discussions it was clear that the introduction of standardised rates was an issue for a minority of participants. The standard fixed charges were questioned as it was felt that Essential Energy may be adding a large margin. There was a reluctance to do it themselves though and use ASPs as they are seen to be too expensive.

> *"The only one I don't like is the MCW. I don't know why if it minor in nature they have to have the set charges. I don't like the idea of a fixed price as Essential Energy's rates are high. Why do they put a margin on it? I would be happy to do it myself and then charge. It is not practical to go down the ASP route as it takes time and costs more. You are looking at a minimum of $6,000-8,000 before you have done any work."*

> *"I like the idea of having the 'do and charge' option as well as the standard option but I feel it still isn't fully de-risking it. I would like no margin or mark up for the 'do and charge' option."*

However, others felt that this showed that Essential Energy was listening and making changes based on earlier feedback from councils.

On the 'construct on existing overhead network' slide it was felt that having almost 50% of the cost allocated to installation labour and supervision seemed very high (approx. 1000 dollars).

> *"$1000 of labour is too much. It doesn't compare to the tariff associated with a new light and bracket. I should be able to take the labour for a light and bracket and add it up and it should add up to this but it doesn't."*

> *"For labour to be over $1000 is a lot. It is a lot of cost for really not a lot of time and labour."*

4.4.2 Traffic Control Charges

Essential Energy presented its review of over 35,000 traffic control tasks and all non-routine public lighting tasks since 2011. This review led to changes in the assumptions relating to the number of crew used (from 2 to 3) which has increased prices. The business replayed that it is not possible to use internal traffic control in a similar way to some of the other DNSPs, as it is not practical and would result in higher costs.

There was mixed feedback on this issue from participants. Some accepted the explanation provided about the cost increase particularly considering the nature of the Essential Energy network area in terms of the large geographic area covered.

Some were still quite negative because the charges are higher than Ausgrid's, and they expected that traffic control would be a greater issue to manage in metro areas than regional/rural, so this didn't seem reasonable. Many participants believed that Essential Energy should explore ways to cut traffic control costs. There were also still questions about why traffic control could not be managed internally due to the large distances or

whether smaller suppliers could be used to reduce costs. Some questioned the criteria used to evaluate whether a job needed traffic control and whether there are differences in the interpretation/definition of complex faults by the different DNSPs.

> *"They are higher than other utilities and there is no incentive for them to find a cheaper way to do things."*

> *"I am not sure they actually use traffic control. I have never seen it! The closest traffic control company is 100km away for me. Other DSNPs have internal traffic control. I don't think the Essential Energy network is suitable for contracted traffic control, with all these small towns."*

> *"There are some things I know you can't compare across the DNSPs but the traffic control costs for CAT V type lights are in urban centres, so they shouldn't be that different across the networks. So why do Essential say they have to have this number (3.6 crew) and the others only have 2 or 1? What are the 3.6 traffic control people actually doing? Where are they standing?"*

> *"My question is why is it more expensive for Essential Energy councils to be responsible for streetlights than Ausgrid councils when the roads, the poles and the equipment are the same."*

Participants appreciated the analysis of the data that had been conducted and requested that more data be gathered throughout the next period, for accurate budgeting for the period following.

4.4.3 Labour Productivity

Next Essential Energy outlined the labour productivity assumptions including the average time to complete routine activities per streetlight (25 minutes) and the average time to travel to a light one-way (10.3 minutes) at an average travel speed of 45.9km per hour.

Essential Energy reviewed Streetlighting task data from 2011- mid 2022 to help forecast the mean number of streetlights being repaired and/or replaced in one 'run'. Participants were informed that a trip is defined by depot and the date the work was completed and compliance timeframes for defects in the Public Lighting Code mean pooling tasks is not always possible. The average tasks per truck roll was 2.96 lights per trip as opposed to the previous assumption of 2.74. The average labour hours to complete one streetlight repair or replacement was presented as 1.62 hours.

Most participants accepted these assumptions, particularly because the average tasks per truck roll had increased, but some participants still voiced the opinion that the number of jobs per trip was quite low at 2.96. Although some lights were assumed to be in rural areas, it was assumed that most lights are in major centres which are near depots, so the trips would be quite short.

> *"They're saying 2.74 jobs per trip. I think that is really low. 2.96 is still low. 80% of the lights are in major centres (Wagga, Bathurst) which are near depots, so these trips are quite small."*

4.4.4 Cat V Pricing

Essential Energy outlined the key factors driving Cat V pricing as being traffic control assumptions and night patrol costs. Sixty-eight per cent (68%) of Cat V roads will require traffic control (down from an 80% assumption) and there will be three traffic controllers (up from two in the last regulatory period). Night patrol costs will increase from $7.95 per light to $11.85 per light. The explanation for this was that inputs include:

- Actual annual cost to deliver bi-annual patrols,

- Number of lights on Cat V roads (decreased),
- Labour cost increase (overtime rates), and
- Public Lighting Team FTE allocation based on the number of assets inspected annually.

Participants felt that Essential Energy had explained this well. There wasn't much further feedback on this issue that wasn't provided during the traffic control conversations.

> *"They have had a good go at explaining Cat V pricing."*

It was mentioned that if the Smart Cities program was adopted then night patrols would not be needed which was seen as a positive.

> *"One thing I find disappointing is that the night patrols are increasing but we presented to Essential Energy the smart cities program which was an asset management system for them. They said they didn't want to do it. If they had done it, they would never need to do a night patrol."*

4.4.5 LED Failure Rates and Warranties

Essential Energy explained that averaged LED failure rates will be used in the Revised Proposal rather than individual failure rates as it is thought to be more equitable for councils across the network.

During the discussions on tables the feedback provided from councils was that the approach to LED failure rates seemed appropriate.

> *"I have no problem with that."*

> *"I think the failure rates are alright, they seem pretty accurate."*

The Regulatory Proposal included a 61% warranty acceptance rate but the business explained that there are plans to include an increased warranty acceptance rate in the Revised Proposal.

Overall, there was positive feedback on the increase in the warranty acceptance rate. However, as mentioned previously, councils did not feel that the process for warranties was transparent, so it was hard for them to understand the capital charges and the proportion of warranties that are accepted.

There were questions about why councils should have to pay for events that are out of their control such as network voltage spikes.

4.4.6 Public Lighting and Unmetered Supplies Team

Essential Energy stated that a revised total of 4.6 FTE is proposed for the streetlighting function for 2024-29 (down from 5.1 FTE in the Regulatory Proposal).

The new of this reduction was positively received by participants at the session.

> *"4.6 people for a big area sounds ok. I have a general scepticism about what they do but that is normal!"*

4.4.7 Overheads

Essential Energy also explained how costs are allocated between business units in accordance with its Cost Allocation Methodology (CAM), which is consistent with the last period and approved by the AER. The basis of the CAM is that overhead costs are shared across business units based on their share of direct costs (not revenue). The public lighting share of support costs was outlined.

It was made clear that networks can have different CAMs which makes cost comparisons between them difficult. Ausgrid's latest CAM was approved in October 2022 and has been used to form their Regulatory Proposal. It reduces the number of cost allocators from about eight to one - weighted average revenue. This has reduced Ausgrid's public lighting opex support costs from 36.58% to 13.80%.

After the explanation provided by Essential Energy on the CAM, there was more understanding and acceptance about why the overheads are higher in the Essential Energy area than other DNSPs. However, there was a desire to understand further the reasons why Ausgrid has moved to a revenue model, and whether that is something that Essential Energy should consider.

> *"It sounds like Essential Energy think that Ausgrid as not doing it right. Cross subsidising. But I think there is a valid reason. There must be a logical reason why Ausgrid moved to a revenue model. I can understand that Essential Energy's overheads would be higher than Ausgrid's because they have so many more depots."*

There was a call for a consistent CAM across the different NSW DNSPs to enable cost comparisons to be made.

> *"I understand that each business has different cost drivers, but you are not comparing apples and apples. They should use the same way of allocating overheads."*

There were a few concerns raised about whether some of the costs are being smeared across from the rest of the business that shouldn't be, e.g. public lighting has its own ICT and customised billing so there were questions raised about whether ICT and network operations costs from the whole business should be allocated to public lighting. There were also comments made that Essential Energy as a whole business should look into what cost efficiencies can be made to reduce overheads.

4.5 Smart streetlighting

Essential Energy presented information about smart street lighting and along with Bathurst Council the Smart Streetlight Pilot that is taking place in that Council area.

There was a lot of interest by councils in the Bathurst trial and the outcomes of that.

> *"It looks pretty good, I'd like it in my area. We've just done CCTV which we've liked."*

Some councils had not considered the benefits of smart lighting to them, only the benefits to Essential Energy, so this was new information for them. It was suggested that the benefits need to be really clearly outlined for councils along with how much it will provide in terms of cost savings, and whether it would be worth it for smaller councils. They were very positive about the potential of dimming and trimming to save money.

> *"The dimming and trimming seem really good and would lead to a lot of savings for Council."*

> *"There needs to be an acknowledgement of shared benefits. We need to be really clear on what the benefits are. We can drop night patrols. We can get rid of some other costs. How much does this offset smart control costs?"*

There was a suggestion to start the roll out as soon as possible, with faulty LED replacements and even cleaning/inspection cycles being ways to slowly introduce smart streetlighting.

> *"The obvious opportunity is the next cleaning and inspection cycle. Some fail every year and we could start slowly by replacing those. You might not need very light. The cost for the extra port is just $20."*

However, there were some concerns about data privacy and ownership and also whether councils would see any benefits after the installation if Essential Energy owns, operates and manages smart lighting. There were also questions about accessibility after installation, particularly for joint use.

> *"The bit that makes me nervous – we pay for it but they operate and manage it and might see benefits after the fact. We could lose all access to benefits. I wouldn't like to outlay $100k and not get the benefits."*

> *"The other thing that concerns me is our access to the light itself. We use a Level 2 contractor to put up street banners on light poles. I would hate for all this to go through an ASP 1 or 3."*

There were also some comments made about future proofing and whether the technology will become outdated in a few years' time. This was a concern in the context of the 5 yearly regulatory proposal framework.

> *"Essential Energy are technically averse. When they do 4-year projections then they are locking you into the technology of today. They need to be more flexible in their thinking about the future."*

In general, there was some frustration amongst those participants who wanted Essential Energy to roll it out quicker as other DNSPs have, rather than asking councils to pay for it.

> *"Ausgrid and Endeavor are trying to get everyone on it whereas Essential seems to be charging Councils for installing them."*

> *"If we didn't have the LED already, then it would be worth it. Once our 10-year warranty runs out then maybe we would look at it. We're not that far into it already so we've still got a fair bit of time until it would be worth looking into this again."*

There was a desire for more engagement and discussion about the opportunities and benefits provided by this technology for councils, for example webinars and forums on the cost savings of smart lighting, the process of installation, how to help councils decide what they want in the way of smart streetlighting hardware, communications and management software.

> *"There needs to be a lot of information dispelled to councils about how they can make decisions around smart lighting."*

> *"I'd want to be engaged on a personal level in terms of either a phone call or an email, but I think a webinar would be best to give the most amount of people the most information."*

> *"I think also emails would be good in keeping us up to date on how things are going in Bathurst."*

Once smart lighting is implemented councils suggested that education will be needed on how best to operate it, for example to dim and trim streetlighting whilst remaining compliant with public lighting levels.

4.6 Future engagement

The last section of the session focused on how councils would like to be engaged going forward, before the revised proposal is submitted and afterwards in the development of the next Regulatory Proposal.

During this session requests for further information were raised such as a comparison of CAMs across different DNSPs, more information about smart lighting as mentioned above, and how Essential Energy calculates its public lighting charges (this may have been provided in the day 2 session).

They also requested a summary of the outcomes from this session and how their feedback was going to be used to impact the Revised Proposal.

> *"It would be good to see a summary of everything we raised today and their response."*

Participants stressed that ongoing engagement is important to them rather than ad hoc engagement. If this is not possible and engagement is implemented for the Proposal then they would like to be involved earlier, in order to co-design the program including the questions and methods of engagement.

> *"Co-design strategy as to how we are going to collaborate and agree."*

Because council representatives often have roles that encompass more than just streetlighting, some wondered if engagement could be at the wider council level and include topics other than streetlighting that are relevant to councils.

Participants suggested that a variety of formats should be used for future engagement in order to reach the largest number of councils – through meetings with their representative bodies such as Joint Organisations, Regional Organisations of Councils and energy consultants, smaller deep dive workshops for more detailed complex issues to large scale forums for wider knowledge sharing and consultation. There was an expectation from some councils that the Joint Organisations and Regional Organisations of Councils will disseminate the key information needed.

> *"The reality is for me that REROC will disseminate the information."*

> *"We need people like Paul and the advisers as well because the explanation is given but we don't know if it's right or wrong. They need to be ones that we are using to explain things."*

> *"No one way gets everyone involved so they need a variety of methods. Essential Energy should include a smaller group for detailed issues and a larger one for higher level issues."*

It was suggested that the same contact from each council is included all the way through the engagement, so they become informed about the issues. They get sent the invitations to all engagement activities, as well as the outputs and slides.

> *"Sometimes Essential Energy will talk to someone else in my organisation and they will get a different opinion. There should be one person involved all the way through and they need to have a background in streetlighting."*

> *"For the next Proposal I think they should be doing the same thing however instead focusing on the continuation of people seen. They should get the names of everyone who came to this forum and include them all in the future. Keeping it consistent. These people get all the emails and the slides in particular. We can be the point of contact."*

Face to face contact was highly valued. Essential Energy covering travel and accommodation costs made a significant difference to councils in being able to attend the forum in Sydney and they would like to see this continue for future face to face engagement.

For more everyday level interaction, one table suggested a client liaison officer within Essential Energy who they could contact directly about public lighting issues.

5. Implications

On the whole Essential Energy was seen to have engaged with councils, joint organisations and independent advisors in an interactive and transparent way. The Sydney session was viewed positively by most, as being educational, informative and 'conducted in the right spirit'. Essential Energy were praised for having conducted detailed further data analysis on some issues, providing a thorough explanation of their pricing assumptions and explaining the content of the Proposal.

Councils views have resulted in advances in many topics since the beginning of the engagement for the Proposal, such as reducing the timeframes for glare shield installation, the Cat V night patrol cycle remaining at two patrols annually, commitment to an annual review of the AML, reduced Zhaga LED OPEX, blended CAPEX charges, traffic control inputs updated and a commitment to explore bringing forward the adoption of smart technologies along with the commencement of the smart lighting pilot in Bathurst.

Some issues have been significantly advanced by further engagement since the submission of the Regulatory Proposal, such as pricing for public lighting failure rates, removal of the design component from the floodlight capex costs and instead providing a fee for service in the Ancillary Network Services (ANS) rates, removing the compliance costs and the revision of the allocation of costs for the Public Lighting team.

Other issues that were considered outstanding, for example overheads, were understood at a deeper level by councils and their representatives during this phase but will ideally require further engagement on an ongoing basis, following submission of the Revised Proposal.

Invoicing and warranties are specific topics that Essential Energy should consider further engagement on. Councils are requesting better quality assurance mechanisms to be built into the billing system to reduce the number of inaccuracies in invoices, which will reduce the need for them to check invoices and will build further trust. They are also asking for a more transparent warranty and capital cost alignment process.

Smart lighting is an area of much interest and opportunity amongst councils and their representatives. Further information should be provided on this topic, particularly on the outcomes of the trial, the benefits for councils including those smaller councils in more rural areas, the process of installation, data privacy and ownership, and assistance for councils regarding decision making about what smart lighting they might want.

Ongoing engagement should be considered for the next Regulatory Proposal rather than Proposal specific engagement. It should be collaborative in nature with an aim to work with councils and their representatives to understand each other's' perspectives and any knowledge gaps or areas of confusion and contention. Where possible it would also be helpful to work with the other DNSPs and the AER to understand the differences in the CAMs, cost allocations and assumptions used in the public lighting models in order to understand where there are opportunities for alignment or sharing of knowledge and best practice.

Future engagement should involve a variety of methods including regular forums/webinars on topics where councils lack knowledge and want further engagement as well as meetings with councils' representative bodies such as Joint Organisations, Regional Organisations of Councils and energy consultants, smaller deep dive workshops for more detailed complex issues and large-scale forums for wider knowledge sharing and consultation. Feedback should be provided after each engagement component on what was heard and how that has been reflected in Essential Energy's proposals and plans.

6. Appendix

6.1 Essential Energy Public Lighting Forum Phase 5 Agenda – 22/08/2023

DAY 1

Project:	Public Lighting Forum – Overview				
Event:	Public Lighting Forum with Local Councils				
Details:					
Dates:	Tuesday 22 August 2023	**Time:**	9:45am-3:30pm	**Duration:**	6 hours
Forum objectives:	• Improve understanding of public lighting, strategies and pricing. • Present the Regulatory Submission, outlining what Essential Energy heard through the engagement process and how decisions have been made on content. • Provide an opportunity for questions and clarification. • Provide a final opportunity for feedback. • Look at emerging issues in public lighting such as smart lighting. • Discuss how Councils would like to be engaged going forward.				

Time	Session details	Responsibility	Materials
Pre-forum	**Tea, Coffee and Morning Tea on Arrival**	Venue Provider	
9:45-9.50am (5 mins)	**Welcome and guidelines for the session** • Acknowledgement of Country • Welcome and thanks for taking the time to attend • Structure of the session • Guidelines • Explain that we have deliberately tried to make sure there is a range of stakeholders on tables to share knowledge and views.	WR Lead Facilitator – Ian Woolcott	PPT slides
9.50 – 9.55am (5 mins)	**Introduction to the session** • Objectives of the Session • We want to make sure we are all on the same page with public lighting before presenting proposal and next steps.	EE	PPT slides
SECTION 1: INTRODUCTION TO PUBLIC LIGHTING			
9.55-10.10am (15 mins)	**Table discussion: Introductions on tables** • *Participants to introduce themselves, which Council they are from and their role within Council.*	WR Table Facilitators	Post it notes and parking lot board

	Also the extent of their knowledge and experience in public lighting? How long they have worked in the area? • What are you hoping to get out of today? • Are there specific issues/questions you have that you would like discussed/answered today? ***Get them to write on a post it note and stick to the parking lot board*** *– explain that we are parking it on the board and EE will come back at the end and check it has all been covered. Anything not covered – they will outline how it will be covered in the future.* • *Explain that they can add to this as the day goes on.*		
10.10 – 10.25am (15 mins)	**Information provision: Introduction to Public Lighting** • Before the slides for this section Adele to throw a couple of questions to the audience e.g. how many assets EE has, what proportion of NSW EE covers (answers are in the map slide) • Introduction of EE Public Lighting Team • Overview of public lighting assets • Public lighting services offered/delivered by Essential Energy team • **Any questions?**	EE	PPT slides
SECTION 2: PUBLIC LIGHTING OVERVIEW – ASSETS AND SERVICES			
10:25am-10:45am (20 mins)	**Information provision: Public Lighting Overview** • What assets are involved in provision of Public Lighting? • What does Essential Energy do to manage and maintain Public Lighting? • Overview of public lighting data processes • How are services delivered? • LED Upgrades overview – where are we up to with LED rollout • Explain how EE manages support from depots ***Adele to ask for questions from the floor after each slide and at the end do a quick call for last questions on this.***	EE	PPT slides
SECTION 3 UNDERSTANDING PUBLIC LIGHTING CHARGES			

10:45-11:00am (15 mins)	**3a Information provision: Understanding pricing and invoices** • Reminder on how SLUOS billing works • Show invoice on screen and talk through it. • Ask facilitators to give out participants invoices so they can go through them at the same time. *(Joint Orgs will have an example invoice from one of their councils)* • **Any questions?**	EE	PPT slides
11.00-11.15am (15 mins)	**Table activity/discussion: Understanding pricing and bills** • ***Give out each Council's individual invoice if not already done so.*** *Joint Orgs will have an example invoice from one of their councils)* • Do you find the **invoices** easy to understand? Why/why not? • Is there anything that you think is confusing or you don't understand on the invoice? • Is there anything you would like improved on the invoice/reporting? • *Then ask the same questions as above on the **asset inventory** and **detailed billing report***	WR Facilitators	Each Council will be provided with one of their own past invoices
11.15-11.35am (20 mins)	**MORNING TEA**		
11:35 - 12:05pm (30 mins)	**3b Information provision: Understanding future Public Lighting Charges** • Key cost drivers • Weighted average pricing method for Capex • Overheads and Support Costs • **Any questions?**	EE	PPT slides
12.05 -12.25pm (20 mins)	**Table activity/discussion: Future pricing and bills** • ***Give out each Council's expected individual future charges if not already done so.*** *This shows what their invoice is expected to be at the beginning of the next period under the revised proposal pricing.* • Reactions to their expected future charges and costs of public lighting services in the future?	WR Facilitators	Each Council will be provided with their own future bill prediction
SECTION 4 UNDERSTANDING OUR REGULATORY SUBMISSION			

12:25 -12:45PM
(20 mins)
	Information provision: What we heard and how we have responded
	• Council Survey and Engagement – what we heard
	• How we have responded - what we included in our proposal examples:
	  ○ Reduced timeframes for Glare Shield Installations
	  ○ Minor Capital Works Education and proposed changes
	  ○ Proposed Annual Review of the Approved Materials List
	  ○ Streetlighting Team Resourcing
	  ○ Weighted Average CAPEX Method
	  ○ One slide – other things we heard and responded, but don't directly impact the proposal: SL Conductor removals/ SL Reporting Tool, Councils support bi annual night patrols, Bills transparent easy to understand
	• **Any questions?**
		EE	PPT slides

12.45-1.00pm
(15 mins)
	Table discussion
	Provide handout 1 to participants
	• Do you have any feedback on the linkage between what EE has heard and what has gone into the regulatory proposal?
	• Do you have any final feedback on any of those topics?
	  ○ Reduced timeframes for Glare Shield Installations
	  ○ Minor Capital Works Education and proposed changes
	  ○ Proposed Annual Review of the Approved Materials List
	  ○ Streetlighting Team Resourcing
	  ○ Weighted Average CAPEX Method
	• What is your general level of support for the content of EE's Proposal on these topics?
	
	Try not to get into the 'remaining issues' that will be covered after lunch
		WR Table Facilitators	Handout 1: What EE heard and how they responded

1.00-1.40PM (40 mins)	**LUNCH** **Informal Question and Answers opportunity**		
SECTION 5 PREPARING OUR REVISED PROPOSAL			

1:40 -2.10pm
(30 mins)
	Information provision: What's happened since our Proposal?
	• Overview of remaining issues, engagement to date and proposed positions
	• Potential Impacts to Pricing (all items)
	• These are all agreed on:
	  ○ Cleaning cycles
	  ○ Auditing
	  ○ Floodlighting Design
	  ○ PLUMS Management
	These are the outstanding issues:
	  ○ Labour productivity
	  ○ Traffic control
	  ○ LED warranties
	  ○ CAT V Pricing
		EE	PPT slides

2.10-2.30pm (20 mins)	**Table discussion: Feedback on outstanding issues**
	Provide handout 2 on the tables for reference
	• Is it clear how the proposal is built up? Has the basis of the assumptions been explained clearly?
	• Do you have any final feedback on these items?
	• What is your level of support for EE's position on the outstanding topics:
	  ○ Labour productivity
	  ○ Traffic control
	  ○ LED warranties (averaging and outliers)
	  ○ CAT V Pricing
			Handout 2: copy of slides on the topics

SECTION 6 THE FUTURE - SMART LIGHTING			
2:30pm – 2:45pm (15 mins)	**Information provision: Smart Lighting** • What is smart lighting and what can it do? • Essential Energy smart lighting journey overview	EE and Bathurst Council	PPT slides

	• Update on Bathurst Smart Public Lighting trial • What comes next?		
2.45-3.00pm (15 mins)	**Table discussion: Smart lighting** • Is smart lighting something that your Council would be interested in? • What information do you think Councils need/want in order to be able to make informed decisions about smart lighting? • How would this information and the findings of the trial be best communicated to Councils? • How do you want to be engaged on the smart street lighting issues going forward?	WR Table Facilitators	
SECTION 7 THE FUTURE - FUTURE ENGAGEMENT			
3:00pm – 3:05pm (5 mins)	**Future engagement: Introduction to discussion** • Brief outline of engagement so far for this Reg Proposal • Want to find out from them what engagement they would like moving forward to Revised Proposal • And what they would like for future engagement into the next Reg Period	EE	
3.05-3.20pm (15 mins)	**Table discussion: Future engagement** • Essential Energy is going to get a draft determination from the AER – how do you want to be engaged after that? • What do you think EE should be doing to involve Councils further in the development of its Proposal? • How would you like EE to engage with Councils for the next Reg Proposal? • E.g. form a Stakeholder Advisory Group? More forums, smaller deep dive groups, workshops, surveys? • Who should be involved?	WR Table Facilitators	
3.20pm – 3:30pm (10 mins)	**Thanks and close** • Summary of key points of contact • Next steps in regulatory submission process • Thanks for attending • ***Check the parking lot board – Has it all been covered? Anything not covered –outline how it will be covered in the future*** • Reminder to fill in end of session evaluation	WR and EE	End of session evaluation

6.2 Issues/questions on the Parking Lot Board

Councils were encouraged to put any issues/questions that they wanted discussed/answered on a 'parking lot' board during the session. Any remaining issues/questions that had not been tackled during the session were answered by Essential Energy at the end.

Below is a list of items that were put on the parking lot:

- Can councils pay for replacement lights up front?
- Can councils pay out capital cost incurred in replacement?
- LED lights – can you replace the LED panel only?
- Is there other technology or data that can replace/address night patrols?
- Process for MCW and options for councils and fees
- MCW proposal to AER
- Why is MCW labour higher than the spot rate?
- Footpath Council work conflicting for maintenance by Essential Energy
- How we notify each other other than DBYD Council Rep
- Why are we being charged for unaccounted for energy fee – mainly in winter?
- We need inspections for timber poles yearly
- Forward cost vs past cost tracking of overhead cost given LED rollout over and direct cost likely to go down
- Insurance cover cost of bushfire burning all lights – who pays?
- Capex drop off FY21-22 – why?
- Capex – how do failure rates apply to capex rates
- Explain the relationship between EE and Treasury in returns etc.
- Shared cost model
- If the supplier repairs an un-warranted LED where do these go?
- Un-warranted due to voltage spikes – why is this Council's issue?

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Public Lighting Engagement with Local Councils – Phase 4
Essential Energy

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