Attachment 15 - Alternative Control Services

2025–30 Regulatory Proposal

January 2024

SA Power Networks

Empowering South Australia

Company information

SA Power Networks is the registered Distribution Network Service Provider for South Australia. For information about SA Power Networks visit sapowernetworks.com.au

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Disclaimer

This document forms part of SA Power Networks' Regulatory Proposal to the Australian Energy Regulator for the 1 July 2025 to 30 June 2030 regulatory control period. The Proposal and its attachments were prepared solely for the current regulatory process and are current as at the time of lodgement.

This document contains certain predictions, estimates and statements that reflect various assumptions concerning, amongst other things, economic growth and load growth forecasts. The Proposal includes documents and data that are part of SA Power Networks' normal business processes and are therefore subject to ongoing change and development.

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Note

This attachment forms part of our Proposal for the 2025–30 Regulatory Control Period. It should be read in conjunction with the other parts of the Proposal.

Our Proposal comprises the overview and attachments listed below, and the supporting documents that are listed in Attachment 20:

Document	**Description**
	Regulatory Proposal overview
Attachment 0	Customer and stakeholder engagement program
Attachment 1	Annual revenue requirement and control mechanism
Attachment 2	Regulatory Asset Base
Attachment 3	Rate of Return
Attachment 4	Regulatory Depreciation
Attachment 5	Capital expenditure
Attachment 6	Operating expenditure
Attachment 7	Corporate income tax
Attachment 8	Efficiency Benefit Sharing Scheme
Attachment 9	Capital Expenditure Sharing Scheme
Attachment 10	Service Target Performance Incentive Scheme
Attachment 11	Customer Service Incentive Scheme
Attachment 12	Demand management incentives and allowance
Attachment 13	Classification of services
Attachment 14	Pass through events
Attachment 15	**Alternative Control Services**
Attachment 16	Negotiated services framework and criteria
Attachment 17	Connection Policy
Attachment 18	Tariff Structure Statement Part A
Attachment 18	Tariff Structure Statement Part B - Explanatory Statement
Attachment 19	Legacy Metering
Attachment 20	List of Proposal documentation

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1 Alternative Control Services

Alternative control services (**ACS**) are direct control services that are initiated by and/or costs are directly attributable to specific customers (ie where the cost of the service can be assigned to an individual customer), that are subject to direct regulatory oversight.

The costs of these services:

- are recovered directly from the customer who requests or otherwise initiates (by action or inaction) the provision of the service; and
- do not form part of our revenue requirements for standard control services (**SCS**).

In July 2023, the Australian Energy Regulator (**AER**) published its final Framework and Approach (**F&A**)[1] paper to apply to SA Power Networks for the 2025–30 regulatory control period (**RCP**). In its F&A, the AER proposed to classify legacy metering services, non-basic connection services, ancillary network services and public lighting services as ACS.

In August 2023, the Australian Energy Market Commission (**AEMC**) published its final report on its review into the regulatory framework for metering services. Amongst other things, the AEMC report recommends accelerating the roll out of smart meters to all customers by 2030. Noting the AEMC's final decision, the AER considers that it would be more appropriate to reclassify legacy metering services as SCS as this would result in the most equitable solution by recovering legacy metering costs across all customers.

We accept the AER's F&A decision to classify non-basic connection services, ancillary network services and public lighting services as ACS and to apply a price cap form of control to those ACS. We also accept that, given the August 2023 AEMC metering review recommendations, it is appropriate to reclassify legacy metering services from ACS to SCS. As discussed further below, in this Regulatory Proposal we propose to reclassify legacy metering services to SCS for the 2025–30 RCP.

Details of our proposed service classification are set out in **Attachment 13 - Classification of Services**.

For this Proposal, we have grouped ACS under the following sub-headings:

- **Ancillary network services** – customer or third-party initiated services closely related to our services classified as common distribution services and non-basic connection services; and
- **Public lighting** – including the provision, construction and maintenance of public lighting installations and emerging public lighting technology.

These are discussed further in section 2 and 3 in this attachment.

1.1 Proposed reclassification of legacy metering services

The AEMC published its final report on its review into the regulatory framework for metering services on 30 August 2023[2]. The final report has made recommendations to improve the regulatory framework for metering services, enabling consumers to access the benefits of smart meters sooner. The AEMC recommended an accelerated deployment of smart meters, with smart meters to be installed for all 'small customers' including residential and small commercial or business customers by 2030.

1 AER Framework and approach, SA Power Networks 2025–30, July 2023.
2 AEMC Final Report Review of the Regulatory Framework for Metering Services, 30 August 2023.

The AEMC's final report is considered by the AER to be a material change in circumstances, with all legacy meters to be replaced by 2030 and changes to regulated expenditure required to support this accelerated rollout. This allows for the departure from the service classification detailed within the AER's final F&A for SA Power Networks in accordance with clause 6.12.3 (b) of the National Electricity Rules (**NER**).

To assist distribution network service providers (**DNSPs**) in preparing their revised regulatory proposal and proposals, the AER released a 'Legacy metering services - guidance note' (**Guidance note**) in November 2023. Noting the AEMC's final decision, the AER considers that it would be more appropriate to reclassify legacy metering services as SCS as this would result in the most equitable solution by recovering legacy metering costs across all customers. The AER considered cost recovery for the metering transition across all customers appropriate as all customers will receive the whole-of-system benefits the smart meters will provide.

SA Power Networks is supportive of reclassifying legacy metering to SCS, where costs are recovered across a broader SCS customer base. This will assist in addressing potential pricing inequities as the smart meter rollout progresses, so that customers with meters replaced later in the deployment are not disadvantaged by being charged inequitably higher costs for receiving the same metering services.

Auxiliary metering services currently charged as fee-based or quoted-services will continue to be classified as ACS in accordance with the AER's F&A. These auxiliary services include, but are not limited to, special meter reading, customer requested meter testing, and non-standard legacy metering services. We are not proposing any change in classification of these services.

Our legacy metering services proposal is set out in **Attachment 19 – Legacy Metering**.

1.2 Rule requirements

Clause 6.8.2(c)(3) of the NER states that our Proposal must include:

- a demonstration of the application of the control mechanism for ACS set out in the F&A; and
- necessary supporting information for that demonstration.

Clause 6.2.6(b) of the NER provides that for ACS, the control mechanism must have a basis stated in the distribution determination for the 2025–30 RCP.

In addition, clause 6.2.6(c) of the NER provides that the control mechanism for ACS may (but need not) utilise elements of Part C of Chapter 6 of the NER (relating to building block determinations – with or without modification).

2 Ancillary Network Services

Ancillary Network Services (**ANS**) include a diverse range of customer requested services that we provide on an as-requested basis. These services include fee-based or quoted services in the following service classification groupings:

- Network ancillary services;
- auxiliary metering services – including special meter reading, meter testing and outages to replace legacy meters; and
- connection services – for services other than basic premises connections and extensions augmentations.

As an ACS, the full cost of providing ANS is recovered from the customer or third-party who requested or initiated the service. These services are provided to customers as fee-based or quoted services:

- **Fee-based services –** These are routine services, where the work involved in services is relatively standard. Fees are derived from the relevant labour rates, average time to perform the work, and other known costs. For fee-based services, a fixed-fee is charged irrespective of the actual time taken to provide the service; or
- **Quoted services –** Some service activities may vary considerably between jobs. This is often the case for one-off, non-standard, activities that are specific to a particular customer's request. For quoted services, charges are formulated on a time and materials basis.

For the 2025–30 period, we propose to retain the fee-based and quoted services that were provided to customers in the current regulatory period. We also propose to include three additional fee-based services as detailed in section 2.2 below.

Our proposed fee-based and quoted service charges have been developed in accordance with the price cap formulae set out in the F&A and section 4 of this document. Our proposed indicative prices for fee-based and quoted services for the 2025–30 RCP are contained in **Attachment 18 - Tariff Structure Statement Part A (Appendix B)**.

2.1 Fee-based services

These are generally routine services, where the work involved in delivering the service is relatively standard and predictable with little variation. Proposed fixed fees are derived from the relevant labour rates, average time to perform the work, and other known costs such as materials or contractor services.

The build-up of costs to provide each fee-based service was developed for the 2020–25 RCP using historical data. We employed a full absorption methodology for determining the costs to provide full cost recovery for each individual service. Direct costs of undertaking the services are attributed to ACS in accordance with SA Power Networks' AER-approved Cost Allocation Method, as detailed in Table 1.

Table 1: Directly attributed costs for ACS fee-based and quoted services

Cost category	Description	Basis of attribution (driver)
Labour and related costs	Includes the following: • Normal and overtime salary and wages, associated payroll on-costs and employee / industry allowances. • Supplementary labour support from external providers.	Standard rates specific to location and job type, directly attributed by employee timesheet to job/work order.

Materials	Stock items or purchases of irregular or low turnover items.	Directly attributed to job/work order. Stock materials incur a percentage on-cost for warehousing and delivery costs.
Contractors	Provision of services by external parties.	Directly attributed to job/work order.
Operational vehicles	Heavy fleet operating costs including fuel, registration, maintenance and repairs, and fleet management[3].	Standard rates specific to vehicle type, directly attributed by employee timesheet to job/work order.

The underlying nature and associated cost build-up of the proposed fee-based services remains consistent with that provided in the current 2020–25 period, with the 2020–25 AER approved prices continuing to be cost reflective. We have not proposed any amendments to the underlying inputs for our fee-based services for 2025–30 and have used the AER's standardised ANS model to escalate our approved 2023/24 fixed-fee prices to 2025 terms.

The cost of delivering ANS is largely driven by labour inputs. Further details on the proposed labour rates associated with our fee-based services is provided in the section 2.4.

For the 2025–30 RCP, we propose to continue to include a margin for fee-based services in our indicative prices. The inclusion of a margin is consistent with the AER's quoted services price cap formula provided within the F&A. We propose to continue to apply a 6 percent margin for the 2025–30 RCP, consistent with that approved for the current RCP. This margin will be applied to the price build up for fee-based and quoted services, in a similar way to the application of indirect costs, with the margin applied at the end of the calculation.

As mentioned above, we are proposing to introduce three new fee-based services for the 2025–30 RCP These new fee-based services are described in section 2.2.

We have developed our proposed fee-based services using the AER's standardised ANS model, refer to **Supporting Document - 15.1.1 - Standardised ANS Model**. Our indicative 2025–30 prices for fee-based services are contained in **Attachment 18 - Tariff Structure Statement Part A (Appendix B)**.

2.2 New fee-based services

In development of this Regulatory Proposal, SA Power Networks has consulted with customers and retailers to assess if our current suite of fee-based and quoted services remain appropriate. We have identified the need for the following three additional fee-based services for the 2025–30 RCP:

- **Multi-site outages** - Retailer requested planned supply outages for the purpose of replacing a legacy meter for multi-occupancy sites where supply is connected by a shared fuse;
- **Retailer bypass request** - Request from a retailer to complete an emergency supply restoration due to a meter fault or other issue, where the metering equipment is not owned by the distributor; and
- **Knock before you disconnect** - Retailer request for SA Power Networks to attempt to contact the customer on site and advise payment options prior to disconnecting the customer for non-payment.

The proposed new fixed fees have been developed on a cost build up basis, reflecting the relevant labour rates as detailed in section 2.4 below, and the expected time required (on average) to perform the task, consistent with the existing methodology. The cost build-up for the new proposed fixed-fees is detailed in **Supporting Document - 15.1.1 - Standardised ANS Model**.

[3] Light fleet vehicles are allocated as indirect costs, included in business overheads.

2.2.1 Multi-site outages for the purpose of replacing a meter

The AEMC's final report[4] recommends a 'one-in-all-in' approach to meter replacements to improve meter replacement efficiency and customer experience in scenarios where meters for customers connected via a shared fuse need to be replaced. These sites, typically found in multi-occupancy dwellings, pose a barrier to rolling out smart meters in certain areas. The potential for multiple customer supply outages to replace separate customer meters will result in a negative customer experience. Under the 'one-in-all- in' approach, Metering Coordinators will replace the legacy meters for all customers on a shared fuse simultaneously under a coordinated approach to minimise customer supply outages. This will make it easier to undertake meter replacements and improve the customer experience for those with a shared fuse.

We acknowledge work is still underway to design this 'one-in-all-in' approach, with an industry working group now set up to consider the processes required to facilitate this service, including the Business to Business (**B2B**) transactions within the market systems. SA Power Networks is actively participating in these discussions.

Consistent with the existing process we expect a meter provider will identify the site as a shared fuse installation when they attend the site to complete a scheduled smart meter upgrade. The meter provider is generally unable to complete the single meter exchange at this time as other customers will be affected by the planned outage. The customers within a multi-site installation may be with various retailers and therefore the retailer for one premise is unable to notify all customers of the planned outage. Planned outages for multi-site installations are currently completed by distributors, on a premise by premise basis, resulting in multiple outages for the customers within the multi-site installation.

Under the AEMC's 'one-in-all-in' scenario, the plan is to coordinate the outages to enable all meters to be replaced within a single outage window, reducing the frequency of planned interruptions for these customers. Under this new process, we expect the meter provider will continue to notify the retailer that the site is a multi-site installation. The retailer will then raise a retailer temporary isolation (**RTI**) request to inform the distributor of the shared fuse installation. SA Power Networks would confirm the customers within the multi-site installation and schedule the single multi-site planned outage, notifying the affected customers and their retailers/meter providers of the date and time of the outage. SA Power Networks will then attend the site at the scheduled time to complete the RTI, with supply to the installation restored once all legacy meter replacements have been completed.

SA Power Networks has an existing fee-based service 'Third party outage for the purpose of replacing a meter' (ACS457) however this fee does not capture the additional requirements associated with multi-site outages. Additional work is required for multi-site RTIs, including the work required to coordinate the retailers nominated metering providers to attend site and complete the meter replacements during the single planned outage window.

For the 2025–30 RCP, SA Power Networks proposes new fixed fees that will be applicable for multi-site RTIs for the purposes of replacing a meter. The fees applicable depend on the number of National Metering Identifiers (**NMIs**) per outage. To provide greater cost reflectivity, we propose to charge a single fixed-fee for each NMI included within the multi-site RTI, where this fee will reflect the portion of costs attributed to the outage for the single premise.

We note, this single site fixed-fee will be charged to the retailer for each of their customers included within the scheduled multi-site outage. This fee will be charged to the retailer for all sites with scheduled legacy meter replacements, even if the meter provider does not attend to complete the meter exchange within the scheduled outage window.

4 Metering review (aemc.gov.au).

Where an additional multi-site RTI needs to be rescheduled due to a meter provider not attending at the scheduled outage time, this will be completed as a single multi-site outage using the existing 'Third party outage for the purpose of replacing a meter' (ACS457) fee. The full fee for the multi-site outage will be charged to the retailer for the single premise.

Different fixed-fees are proposed for single crew RTIs and truck crew RTIs reflecting the underlying cost in providing the proposed services.

We have developed our proposed multi-site RTI fee-based service based on information available at the time of this proposal. The proposed fixed-fees are set out in Table 2. Where the final process varies from that contained in this proposal, we will update the cost build up of these fixed-fees in our Revised Regulatory Proposal.

2.2.2 Retailer bypass request

SA Power Networks currently provides 'Retailer Bypass Request' as a quoted service on a metropolitan and regional basis (ACS458 and ACS459). Following consultation with retailers, we propose to update this service to be provided on a fixed-fee basis providing greater price certainty for retailers wanting to utilise this service.

The retailer bypass request will be provided where a retailer requests SA Power Networks to complete an emergency supply restoration in relation to metering equipment not owned by us. This is to ensure continuity of supply for customers where a retailer's metering provider may be unable to immediately rectify the customer's metering.

We propose to use the existing quoted services fee codes for these new fee-based services. We also propose to update the description to be slightly broader, noting the planned accelerated roll out of smart meters. The proposed retailer bypass requested fee-based services are provided in Table 2.

2.2.3 Knock before you disconnect

Recent trials undertaken by SA Power Networks have demonstrated that a pre-disconnection visit (knock before you disconnect) drives better customer engagement with retailers, resulting in an increase in engagement post disconnection warning notice and an increased cancellation of requests to disconnect for non-payment.

The proposed process would include a simple knock on the door, or letter drop where the customer is not home, encouraging the customer to contact their energy retailer prior to disconnection. Their energy retailer can help by providing a range of support and referral services if the customer is experiencing payment difficulties. Other information to provide support, including brochures for financial counselling and the national debt helpline will also be left on site.

The process aims to:

- Ensure the customer is aware that they are on the disconnection pathway and need to contact their retailer as soon as possible;
- Connect the customer with their retailer, as well as a range of broader assistance options;
- Prompt the customer to either make payment or engage with their retailer to determine what help and support they need, including offering hardship support if appropriate; and
- Ultimately, to prevent a disconnection for non-payment from being created and the customer losing supply.

The knock before you disconnect program was strongly supported throughout our customer engagement process. This program aligns with our full signatory status with The Energy Charter[5], which includes a key principle to support customers facing vulnerable circumstances.

SA Power Networks is continuing to explore the provision of a knock before you disconnect program within our standard disconnection process. We note, in the future retailers will be able to facilitate disconnections and reconnections remotely through installed smart meters. This will reduce SA Power Networks involvement in the disconnection process. Noting this, we are proposing to include a knock before you disconnect service as an ACS. This service is closely related to de-energisation services classified as ACS within the 'Connection application and management services' service group in the F&A.

As ACS, the proposed 'knock before you disconnect' fee will only be applied where a retailer has specifically requested SA Power Networks to perform this service. We have not included this service within the cost build-up of the retailer requested disconnection of supply fees. The proposed retailer requested knock before you disconnect fee-based service is provided in Table 2.

2.2.4 Proposed new fee-based services

The proposed new fee-based services are set out in Table 2 and are also included within our indicative ANS price schedule in **Attachment 18 - Tariff Structure Statement Part A**.

Table 2: Proposed new fee-based services ($2025/26)

Service	Proposed fee code	Description	Proposed Fee
Multi-site outages for purpose of replacing a meter [6]	ACS472	Single Crew RTI for multi-site – 2 NMIs	$296.84
	ACS473	Single Crew RTI for multi-site – 3 NMIs	$197.90
	ACS474	Single Crew RTI for multi-site – 4 NMIs	$148.42
	ACS475	Single Crew RTI for multi-site – 5 NMIs	$118.74
	ACS476	Single Crew RTI for multi-site – 6 NMIs	$127.31
	ACS477	Single Crew RTI for multi-site – 7 NMIs	$109.13
	ACS478	Single Crew RTI for multi-site – 8 NMIs	$95.49
	ACS479	Single Crew RTI for multi-site – 9 NMIs	$84.88
	ACS480	Single Crew RTI for multi-site – 10 NMIs	$76.39
	ACS481	Single Crew RTI for multi-site – Over 10 NMIs	$71.04
	ACS492	Truck Crew RTI for multi-site – 2 NMIs	$683.49
	ACS493	Truck Crew RTI for multi-site – 3 NMIs	$455.66
	ACS494	Truck Crew RTI for multi-site – 4 NMIs	$341.75
	ACS495	Truck Crew RTI for multi-site – 5 NMIs	$273.40
	ACS496	Truck Crew RTI for multi-site – 6 NMIs	$289.46
	ACS497	Truck Crew RTI for multi-site – 7 NMIs	$248.11
	ACS498	Truck Crew RTI for multi-site – 8 NMIs	$217.09
	ACS499	Truck Crew RTI for multi-site – 9 NMIs	$192.97
	ACS500	Truck Crew RTI for multi-site – 10 NMIs	$173.68
	ACS501	Truck Crew RTI for multi-site – Over 10 NMIs	$159.48
Retailer Initiated Bypass	ACS458	Supply restoration due to third party meter fault or issue within metropolitan area	$518.71
	ACS459	Supply restoration due to third party meter fault or issue within regional area	$771.99

[5] *The Energy Charter, First Edition*, January 2019, page 9. TheCharter_20190328.pdf (theenergycharter.com.au).

[6] Multi-site outage fixed-fees shown are calculated on a per NMI basis. This fixed-fee will be charged for each NMI within the outage. For example, if there are five NMI's, ACS475 will be charged for each of the five NMI's within the single crew outage.

Service	Proposed fee code	Description	Proposed Fee
Knock before you disconnect	ACS406	Retailer request to knock before an installation is disconnected for non-payment. This would be completed a few days before the disconnection date, encouraging the customer to contact their retailer prior to disconnection	$43.39

2.3 Quoted services

Quoted services are charged on a time and materials basis, consistent with the AER's quoted services price cap formula as set out in section 4.2. In comparison to fee-based services, these activities tend to vary considerably based on job complexity, the time expected to complete the job and any specific requirements of the customer requesting the work.

We provide a range of non-standard services on a quoted basis including:

- complex access permits;
- network safety services (eg high load escorts);
- inspection and auditing services;
- security lighting installations and upgrades;
- customer requested provision of electricity network data;
- connection services, including connection point alterations, temporary supply, temporary isolations, technical / engineering studies, specification fees, specification re-compliance, works and design compliance;
- enhanced connection services;
- asset relocations;
- standard and negotiated connection services (premises connections, excluding extensions and augmentations);
- customer initiated or triggered network asset relocations / re-arrangements;
- third party funded network alterations or other improvements;
- authorisation and approval of third-party service providers' design, work and materials;
- sale of approved materials or equipment;
- attendance at a customer's premises to perform a statutory right where access is prevented;
- provision of training to third parties for network related access;
- auxiliary metering services, including meter reconfiguration and removal of legacy meters; and
- public lighting, including light installations or upgrades, smart lighting infrastructure, and LED cleaning where cleaning is required prior to the 10-year scheduled clean.

Quoted services will be charged on a time and materials basis using pricing inputs approved in the AER's Final Determination. Our proposed labour rates for 2025–30 are set out in section 2.4.

We propose to continue to apply a six percent margin to quoted services for the 2025–30 RCP. This margin will be applied to the total costs of labour, contractor services and materials.

2.4 Proposed Labour Rates

Labour is a major cost component in the provision of fixed-fee and quoted services. The cost of labour is determined by applying the applicable hourly rate with the time required to efficiently complete the service. SA Power Networks propose to continue apply the six labour categories for the 2025–30 period, where similar labour classifications are grouped under one labour code, as set out in Table 3.

For the 2025–30 RCP, SA Power Networks proposes to escalate the current approved ANS labour rates using the AER's labour escalation formula, including labour price growth[7]. Our proposed base labour rates, excluding overheads, margin and tax are provided in Table 3.

Table 3: Labour classifications and proposed base labour rates ($2025/26)

Labour Code	Description	Labour categories covered	Proposed labour rate (ordinary time)	Proposed labour rate (overtime)
Admin	Administrative Officer	Business support officers, project creation and close-out, administration relating to projects (invoicing, rebates)	$48.10	$96.19
PM	Project Manager	Network project officers, powerline network designers, network and field services project managers	$96.22	$192.43
FW	Field Worker	Trade skilled worker, asset locators, customer connect officers, compliance officers, substation construction, maintenance, testing, supervisors, transformer / recloser workshop, metering services	$77.08	$154.16
Tech	Technical Specialist	SCADA, telecommunication officers, network facilities, quality of supply officers, telecommunications network operating, network standards, network access, substation estimators, surveyors	$96.22	$192.43
Eng	Engineer	Substation design, network planning, network protection, earthing, project engineers	$89.80	$179.60
SEng	Senior Engineer	Protection engineers	$102.63	$205.25

The labour cost build-up for fee-based services is contained within **Supporting Document - 15.1.1 - Standardised ANS Model**.

[7] Labour price growth is consistent with that applied within main SCS.

3 Public Lighting

3.1 Overview

SA Power Networks provides public lighting services to 69 customers throughout South Australia, including local councils and the Department for Infrastructure and Transport (**DIT**).

Public lighting improves the safety and amenity of our local communities through the supply, installation and maintenance of approximately 240,000 public lights installed across South Australia. Of these, 138,000 (58%) have been upgraded to Light Emitting Diodes (**LED**s), providing improved energy and maintenance outcomes for our customers. We are continuing to work with our public lighting customers to upgrade the remaining High Intensity Discharge (**HID**) lights to LEDs where this is cost-effective.

SA Power Networks' public lighting proposal is the result of extensive consultation with public lighting customers. We have continued to apply a building block approach that reflects the efficient costs of providing public lighting services requested by customers for the 2025–30 RCP. The public lighting pricing model used to develop our public lighting proposal is largely consistent with that used for the 2020–25 RCP. We have updated the model to reflect current period actuals and updates to service levels requested through our customer consultation program.

Our public lighting proposal reflects the efficient costs of providing public lighting services to our customers. Agreed service levels are detailed within the customer endorsed Public Lighting Service Framework (refer to **Supporting Document 15.2.5 – Public Lighting Service Framework**). Our Proposal has been developed using our public lighting pricing model, comprising the post tax revenue model, roll-forward model and depreciation module as provided in **Supporting Documents 15.2.1 – Public Lighting Pricing Model**, **15.2.2 – Public Lighting PTRM**, **15.2.3 – Public Lighting RAB Roll Forward Model** and **15.2.4 – Public Lighting RAB Depreciation Module**.

Proposed public lighting price outcomes will vary from customer to customer based on the specific services selected and type of lights installed. On average we would expect customers to experience price reductions for HID lights (~20.3%) from 1 July 2025, with price increases forecast for LEDs (~1.2 %)[8] largely due to increases in the weighted average cost of capital (WACC) and inflation.

Our proposed public lighting charges have been developed in accordance with the AER's price cap formula set out in the F&A and as detailed in section 4. Our proposed indicative prices for public lighting services are set out in **Attachment 18 - Tariff Structure Statement Part A (Appendix B)**.

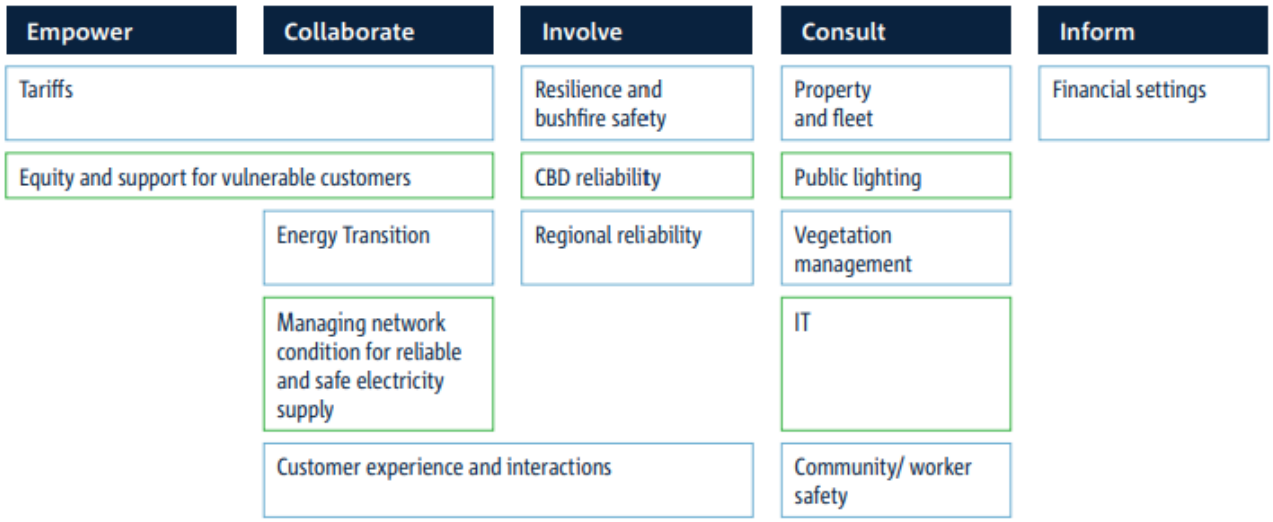
3.2 How customers informed our proposal

In collaboration with the Local Government Association of South Australia, SA Power Networks established a Public Lighting Working Group (**PLWG**) in 2018. This PLWG was established as a representative body to facilitate a practical ongoing consultation with SA Power Networks and the transition to the new regulatory framework from 1 July 2020. We have continued to work collaboratively with the PLWG on key matters affecting the delivery of public lighting services in South Australia, with meetings held on a quarterly basis.

This public lighting proposal has been developed in collaboration with public lighting customers, through ongoing engagement with the PLWG and our deeper engagement (Focused Conversations) conducted throughout 2022 and 2023. Public lighting was identified as a priority topic for the Focused Conversations, as part of our reset engagement program. Figure 1 details the priority topics identified for focused conversations and the level of engagement based on the IAP2 spectrum of engagement, from empower/ collaborate to inform.

[8] The percentage change in HID and LED pricing excludes energy only lights.

Figure 1: Priority topics for focused conversations and level of engagement



SA Power Networks consulted directly with public lighting customers through 'Focused Conversation' public lighting workshops held in October 2022 and April/May 2023.

The first Focused Conversation workshop was held on 7 October 2022, with invitations sent to all South Australian councils and DIT. The workshop was facilitated both in person and online, to provide greater access for regional and remote councils to attend. We had 31 participants attend in person and 11 joined online.

The purpose of this initial workshop was to engage with our public lighting customers early in the development of our proposal to consider the range of public lighting services provided and where they may need to be refined. Prior to the workshop, all participants were provided with a pre-reading pack, providing them with a background to the SA Power Networks' Reset 2025–30 process and the topics to be discussed within the workshop.

The topics for the workshop, listed below, were informed through ongoing consultation with the PLWG and consideration of the consultation focus areas during the development of our previous, 2020–25 Regulatory proposal:

- Asset management activities, including column inspection and replacement, cable faults and LED cleaning;
- Single Light Out (**SLO**) service level performance and our Guaranteed Service Level (**GSL**) obligations;
- Smart lighting; and
- The public lighting customer portal.

For each focus area, an update was provided on the status and current performance against service levels where applicable. To understand customer preferences, a range of options and questions were provided for discussion and consideration. Participants provided their feedback on worksheets or within our online survey tool during the workshop. The outcomes from the preliminary workshop are detailed in Table 4.

Table 4: Focused Conversation workshop 7 October 2022 - feedback summary

Focus area	Options Considered	What we heard
Asset Management		
Column Inspection & Replacement	Option 1: (current practice) - Inspect columns every 5 years in high corrosion zones and 10 in low corrosion zones. - Replace columns with 'Extreme' and 'Very High' condition ratings - Reinspect 'high' severity in low corrosion zones every 5 years Option 2: - Inspect columns every 5 years in high corrosion zones and 10 in low corrosion zones. - Replace columns with 'Extreme' condition ratings Option 3: - Inspect columns every 5 years in high corrosion zones and 10 in low corrosion zones. - Replace columns with 'Extreme' and 'Very High' condition ratings	57% of customers supported Option 1, continuation of the current practice, with SA Power Networks to replace columns with a condition rating of 'Extreme' and 'Very High' (allowing significant deterioration, deep pitting and corrosion).
Cable replacement	Option 1: (current practice) - Replace 4.5km of cable each year (4km metro, 0.5km regional). Where ≥ 3 failures per cable section. Option 2: - No planned replacements undertaken	96% of customers indicated they support Option 1, continued proactive lighting cable replacements for 2025–30.
LED cleaning	One round of LED testing was completed in 2021, next round of testing had just commenced at time of the workshop. Initial results discussed. Too early to inform any decision making at this point. Further information will be provided in 2023 after more testing has been undertaken.	Public lighting customers discussed need for consistency in testing process, time of year, moon phase, position for testing.
GSL Scheme		
GSL Payment	Option 1: (current practice) - GSL payment continues to pay a GSL for each period the light is not repaired (5 days metro or 10 days country) Option 2: Move to a single payment of $25 for each street light outage reported.	87% of customers support Option 2, moving to a single payment of $25 for each street light outage reported and not repaired within agreed timeframe.
Performance targets	Option 1: (current practice) - all faults to be repaired within 5 business days for metro and 10 business days for country areas. Option 2: - Introduce different performance targets for complex and simple faults.	79% of customers indicated they would support Option 2, to introduce different performance targets for complex and general faults. Customers also requested costing scenarios for reintroduction of a night patrol to be provided at next round of consultation.
Smart lighting	An update on smart lighting was provided, including outcomes of trials underway. Sought feedback on:	

Focus area	Options Considered	What we heard
	- Public lighting customers strategic direction for smart lighting	Councils position on smart lighting varied, with some being quite advanced and others having little interest at this stage.
	- The challenges and opportunities for smart lighting	Biggest challenge was associated with justifying the cost benefit of smart lighting.
	- what role do you see SA Power Networks playing in the rollout of smart lighting.	The view on SA Power Networks' role varied, most saw SA Power Networks role as an advisory one, with others wanting us to install smart lighting when requested by councils.
Public lighting Portal	SA Power Networks provided an update on the public lighting portal and other future enhancements underway. Feedback was requested on other enhancements customers would value. We also sought to understand how many customers were actively using the portal to obtain information.	70% of customers indicated they are using the customer lighting portal for information.

The learnings from this Focused Conversation workshop were then used to develop a range of pricing scenarios for further consideration by public lighting customers. These scenarios and their associated pricing impacts were presented at an in-person workshop held on 13 April 2023, enabling customers to fully understand the price impact of decisions they were making. There were 15 external participants who attended this in-person workshop. We noted several participants attempted to connect to this workshop remotely on the day, however we did not have hybrid capabilities for this meeting. We therefore committed to holding a further on-line workshop to cover this content with public lighting customers who were unable to attend in person. This additional session was held on 24 May 2023, with 19 additional public lighting customers attending. The outcomes from the April and May workshops are detailed in Table 5.

Table 5: Focused Conversation workshops April / May 2023 - feedback summary

Focus area	Options Considered	What we heard
Asset Management		
Column Inspection & Replacement	Option 1: (current practice) - Inspect columns every 5 years in high corrosion zones and 10 in low corrosion zones. - Replace columns with 'Extreme' and 'Very High' condition ratings - Reinspect 'high' severity in low corrosion zones every 5 years Option 2: - Inspect columns every 5 years in high corrosion zones and 10 in low corrosion zones. - Replace columns with 'Extreme' condition ratings Option 3: - Inspect columns every 5 years in high corrosion zones and 10 in low corrosion zones. - Replace columns with 'Extreme' and 'Very High' condition ratings	52% of customers supported moving to Option 2, noting the reduction in pricing outcomes and ongoing improvement in unplanned column failures. SA Power Networks will continue to inspect on a 5 and 10 year cycle based on corrosion zones, with columns with a condition rating of 'Extreme' immediately flagged for replacement. No re-inspections will be completed for 'high' or 'very high' rated columns.

Focus area	Options Considered	What we heard
Cable replacement	Option 1: (current practice) - Replace 4.5km of cable each year (4km metro, 0.5km regional). Where ≥ 3 failures per cable section. Option 2: - No planned replacements undertaken	74% of customers continued to support Option 1, continued proactive lighting cable replacements for 2025–30.
LED cleaning	Option 1: - No testing program undertaken, LEDs cleaned as quoted service. Option 2: (current practice) - Continue to test 9,000 LEDs to monitor deterioration. 10 year cleaning. Option 3: - Radom test to inform LED cleaning, with cleaning performed as quoted service where requested by councils.	Councils generally supported a continuation of the LED testing program, with 76% of customers supporting this approach. There was an even spread between Option 2 (10 year clean) and Option 3 (quoted service for cleaning). We note, one council supported option 3 as they thought the cycle should be less than 10 years for lights close to the coast.
Single Light Out (SLO) repair service standard[9]		
SLO performance targets	Option 1: (current practice) - all faults to be repaired within 5 business days for metro and 10 business days for country areas. Option 2: - Align with NSW service standard, simple faults repaired within 10 business days and complex faults within 30 business days. Option 3: - Align with NSW service standard for complex faults. Simple faults repaired within 5 business days (metro and regional) and complex faults within 30 business days	59% of customers supported moving away from the current service standard, with 55% of customers supporting Option 3 where all simple faults will be repaired within 5 business days and complex faults within 30 business days.
Night patrols	Option 1: (current practice) - No night patrol, customers continue to report SLO through existing processes. Option 2: - SA Power Networks to undertake an annual night patrol of Category V lighting. Option 3: - SA Power Networks to undertake an annual night patrol for all lights (Category V and P).	86% of customers supported Option 1, where no night patrol is conducted. DIT provided some support for undertaking a night patrol for Category V lighting.
Bulk lamp replacement	Option 1: (current practice) - Continue to undertake bulk lamp and Photo Electric (**PE**) cell replacement program. Option 2: - Prolong lamp replacements, run to fail. Transition to LEDs where possible, lamps replaced for post top / decorative lights. Option 3: - No planned replacement program, replace on failure	86% of customers supported Option 2, where no bulk replacement will occur, and lights will transition to LEDs were possible. SA Power Networks to work with councils on suitable arrangements to transition post top / decorative lights to LEDs.

[9] As discussed in section 3.3, the GSL scheme will cease to apply to public lighting in South Australia from 1 July 2025.

Focus area	Options Considered	What we heard
Public lighting Portal	Option 1: - Continue to use existing portal with no future enhancements. Option 2: - Provide an allowance for additional functionality to be developed in consultation with public lighting customers	78% of customers supported the inclusion of $750,000 in capital for the 2025–30 RCP to continue to develop the public lighting portal in consultation with customers.
Smart lighting	Options 1: - SA Power Networks to deploy devices to create connectivity smart lighting network for metro and major country towns. Option 2: - Smart lighting to be deployed as a quoted service on customer request. Option 3: - No SA Power Networks smart lighting offering, with all smart lighting projects to be driven and funded by individual customers.	59% of customers supported Option 2, where customers would have the flexibility to work with SA Power Networks on a smart lighting solution for their specific council.

SA Power Networks has incorporated these outcomes, as agreed with public lighting customers, into this public lighting proposal.

Since the Focused Conversation workshops held in April / May 2023, we have noticed an increase in Photo Electric (**PE**) cell failures associated with LEDs. SA Power Networks installs NEMA PE cells on LEDs, with an initial expectation these PE cells would have a useful life of 20 years consistent with the LED luminaire. Therefore, we did not include any plans for a bulk replacement of the NEMA PE cells in the 2020–25 RCP. Noting this increased failure rate, which suggests that the NEMA PE cells are unlikely to last for the expected 20 years, we propose to introduce a bulk replacement for the NEMA PE cells. We propose to replace the PE cell every 10 years, which will be completed when the LED cleaning is undertaken. This results in a small increase in prices (approximately $1.75 per LED light) to cover the incremental costs for the replacement PE cell and time on site. We discussed this with proposal with the PLWG on 22 November 2023, with the PLWG generally supporting this approach as being prudent and efficient.

Further details on changes to proposed services, as agreed with public lighting customers, are provided in section 3.4.

3.3 Public lighting service standards and GSL scheme

In preparation for the Essential Services Commission of South Australia's (**ESCoSA's**) review of the Electricity Distribution Code (**EDC**), we commenced consultation with public lighting customers in November 2021, on service standards and the GSL scheme for public lighting. SA Power Networks prepared a consultation paper providing historical performance and drivers for GSL payments for the PLWG, with this discussed in detail at the PLWG meeting in March 2022.

ESCoSA commenced its review of the EDC to apply to South Australia for the 2025–30 RCP in April 2022[10]. Following ESCoSA's release of its issues paper, a special meeting of the PLWG was held with ESCoSA on 28 April 2022, to discuss the EDC review for public lighting. There were mixed views across the PLWG members, with some members wanting to retain the GSL scheme and other's suggesting the scheme is no longer required.

10 ESCOSA - Electricity distribution code review.

A further meeting of the PLWG was held on 25 May 2022, this meeting focused on ESCoSA's ongoing involvement in setting service standards for public lighting. The PLWG expressed a preference for ESCoSA to continue to set service standards and monitor SA Power Networks' ongoing performance. We included this feedback within SA Power Networks' submission to ESCoSA on 2 June 2022.

ESCoSA released its draft decision on the EDC on 16 January 2023. The draft decision was to remove the street light repair service standard from the EDC. ESCoSA noted the Public Lighting Service Framework contains a street light repair service level and this provides a structure for SA Power Networks to deliver and be held accountable for timely street light repairs. ESCoSA also proposed to remove the street light repair GSL payment from the EDC, on the basis that its benefit is limited to being a weak incentive for people to report street light outages. Submissions on the draft decision were due by 21 March 2023.

While the general preference expressed in the PLWG meeting on 15 February 2023, was to retain a GSL payment for public lighting within the EDC, SA Power Networks' submission supported the removal of the GSL payment. We also recommended retaining an updated street light repair service standard, including different timeframes for simple and complex faults in line with customer feedback from our October Focused Conversation workshop.

ESCoSA released its final decision on the EDC on 26 June 2023[11]. In its final decision, ESCoSA removed the GSL payment for public lighting and street light repair service standard from the EDC. The Public Lighting Service Framework will provide the structure for SA Power Networks to deliver and be held accountable for timely street light repairs. The framework will be supported by transitional street light annual performance reporting requirements that ESCoSA will apply in the 2025–30 period. The manner, form and content of reporting requirements, which will be subject to further consultation, will be set out in Electricity Industry Guideline No. 1. ESCoSA is expected to commence consultation on these reporting requirements in June 2024.

Noting these changes to the EDC, SA Power Networks has removed all costs associated with the GSL scheme from our public lighting pricing model.

3.4 Public lighting services to be provided for 2025–30

Public lighting services are defined to include the:

- operation, maintenance, repair and replacement of public lighting assets;
- alteration and relocation of public lighting assets; and
- design, procurement and construction of new public lights as requested.

The provision of public lighting services, and associated maintenance and replacement responsibility, is determined in accordance with the public lighting service 'package' selected by public lighting customers.

Customers can choose which public lighting service offering best suits their individual circumstances, including who funds the initial asset installation and future replacement, and who is responsible for the operational maintenance of the light once installed. Our pricing proposal has been developed to continue to provide this flexibility in public lighting service offerings to our public lighting customers.

Our proposed public lighting service packages are as follows:

- SA Power Networks or Street Light Use of System (**SLUOS**) – Where we have funded the public lighting installation and provide a full maintenance service for approximately 53 percent of installed public lighting assets (poles and lights).

[11] Electricity distribution code review -final decision (escosa.sa.gov.au).

- Transferred Infrastructure (**TFI**) - Customers or developers fund the installation of new public lighting assets and gift the public lighting installation to us following completion. We then assume full maintenance responsibility for the public lighting installation, including responsibility for future replacement of the installation at the end of its useful life.
- Energy Only (**EO**) - Customers fund the installation of the public lighting assets and retain ongoing responsibility for maintenance and replacement of these public lighting installations. Our responsibility for these assets is administrative only, with the public lighting installations recorded in our Geographic Information System (**GIS**) and any faults received forwarded to the public lighting customer for their action.
- Customer Light Equipment Rate (**CLER**) - Customers fund the installation of the public lighting assets, with SA Power Networks maintaining minor components (eg lamps). The customer retains responsibility for the future replacement of all major public lighting installation components.
- Public Light Customer (**PLC**) - With the introduction of LED lighting, a further service offering was introduced. Under this service offering, we undertake routine maintenance of the public lighting installation and have responsibility for future replacement of public lighting infrastructure (columns). The public lighting customer will retain financial ownership and be responsible for replacement cost of the luminaire.

Where we are responsible for maintenance, we will maintain the public lighting installation to ensure public lighting installation continues to provide the initially agreed lighting levels.

SA Power Networks will offer to install new public lighting installations or replace existing public lighting installations under a PLC offering, where the customer will fund the installation up-front. This public lighting installation service has been included, and will be priced, as a quoted service (refer to section 4.2).

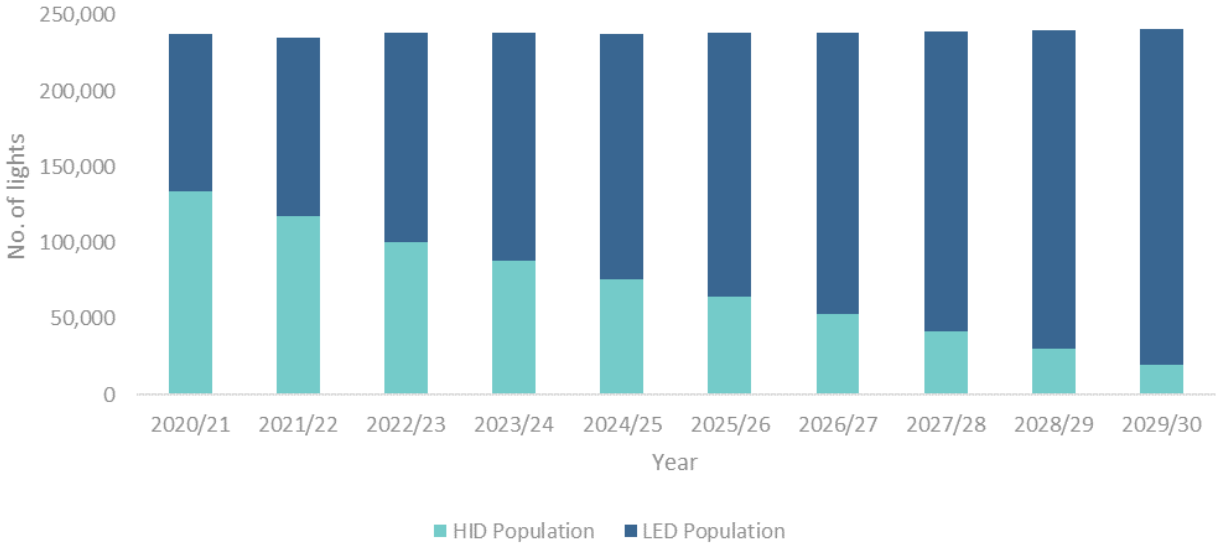
3.4.1 Transition to LED / smart lighting

There are approximately 240,000 luminaires / public lighting installations across our network. As at July 2023, about 138,000 (58 percent) of SA Power Networks public lights have been upgraded to more energy efficient LEDs, providing improved energy and maintenance outcomes for our public lighting customers[12]. Public lighting customers have indicated their continued support for the transition to LED lighting where cost effective.

Figure 2 provides the expected transition from HID lights to LEDs. We expect a growth rate of 1,800 public lighting installations per annum, with these installations expected to be LED installations.

[12] With each new LED installed, public lighting customers reduce energy costs and greenhouse emissions by about 80 percent.

Figure 2: Forecast transition from HID to LED luminaires



We are also continuing to see the evolution of smart lighting services. Smart street lighting with remote monitoring enabling automatic reporting of failures, improving maintenance outcomes for public lighting customers. Smart lighting services, such as smart controls, can allow lights to be dimmed when streets are not used or ensure enhanced brightness for specific events or safety reasons. In line with public lighting customer feedback, we will work with specific councils as requested to explore smart lighting solutions specific for their council. Where smart lighting services are delivered by SA Power Networks, these will be provided as a quoted service which is fully funded by the customer requesting the service.

3.4.2 Column inspection and replacement

We are responsible for approximately 80,000 dedicated streetlight columns across our network, with the oldest columns installed in 1956. Columns are inspected on a five-year cycle in high corrosion zones and 10-year cycle for low corrosion zones. Inspections are focused on the condition of the column, enabling identification of assets for planned replacement prior to asset failure. We propose to continue to inspect approximately 9,300 columns per year over the 2025–30 RCP.

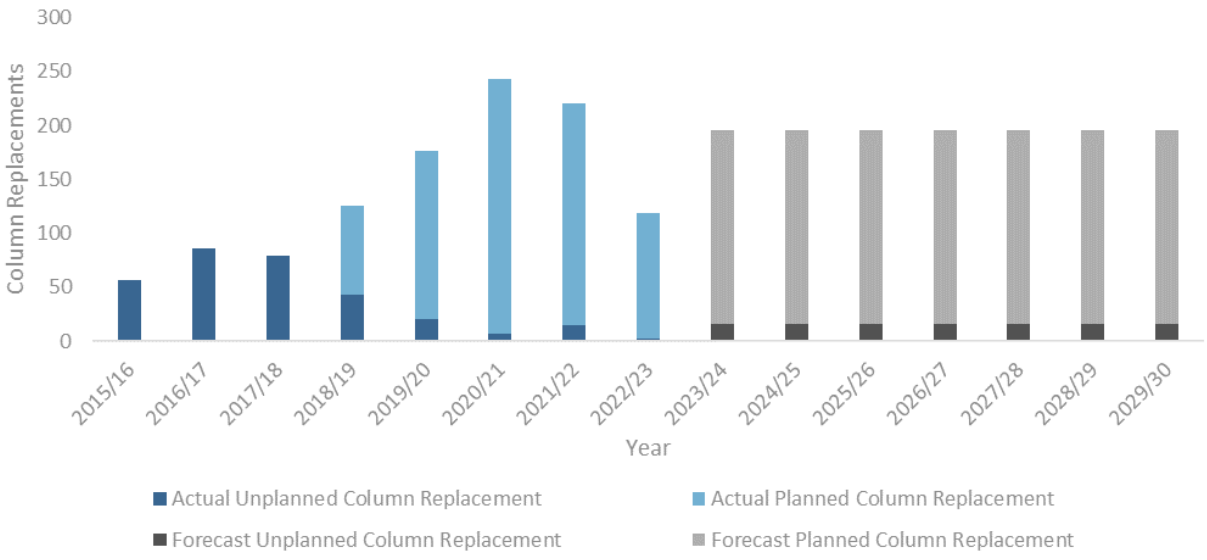
Prior to the commencement of our inspection and replacement program we had approximately 60 columns fail in service per year. When a column fails in service, it will fall to the ground as there is no conductor to hold the column upright. This may result in damage to third party assets or personal injury. This risk was considered unacceptable by public lighting customers who requested SA Power Networks increase our planned replacement program to include all public lighting columns assessed as having an 'Extreme' and 'Very High' condition rating.

Since the commencement of our inspection and planned column replacement program, we have seen a significant reduction (73 percent) in the number of columns failing in service.

Noting this reduction in unplanned column failures, public lighting customers have requested we update our planned column replacement criteria to only proactively replace public lighting columns assessed as having an 'Extreme' condition rating. This change in replacement criteria is forecast to reduce our planned column replacements from 360 to 179 columns per year. We have also updated our unplanned column replacements to reflect the most recent historical data, with a forecast of 16 unplanned column failures per year.

The planned and unplanned column replacement historical and forecast volumes are displayed in Figure 3.

Figure 3 - Annual planned and unplanned column replacements



3.4.3 Cable faults

There is approximately 2,750 kilometres of underground public lighting cable installed on our distribution network. This cable is subject to fault, typically when the cable's protective coverings are broken down over time, allowing moisture to enter the cable and cause a fault to earth. Cable faults are identified through our SLO process, with the fault resulting in no power supply to the light fitting.

Reactive cable repair will be completed to rectify individual cable faults as they occur. A SLO work order is issued for our field crew to attend the site. Once the crew ascertain that the fault is related to a cable fault, they locate the fault in the cable and replace the section of faulty cable, with a new section of cable joined in. Approximately 1.5 metres of cable is typically replaced during an unplanned cable repair.

Rectification of cable faults take significantly longer than other SLOs, taking on average 31 days to resolve. These faults are often unable to be resolved on the first visit due to a number of reasons:

- Public lighting cable is underground, as a result isolation of the fault may take time. Where a fault is unable to be isolated within 20-30 minutes it will be referred to a follow up crew for investigation;
- Rectifying cable faults will generally require access to roads, footpaths and driveways. A civil crew and backhoe will generally be required;
- 'Dial before you dig' checks are required prior to undertaking any excavation work;
- Additional traffic and pedestrian control may be required to ensure public safety while the work is carried out;
- In some cases an isolation of electricity supply in the area may be required, with a four business day customer notification period applicable for planned outages; and
- Once work is scheduled, the field crew will typically be on-site between half a day and a full day to repair a single cable fault.

Throughout our engagement program, customers indicated their support for SA Power Networks to align with the NSW repair service standards for complex faults, that is to repair complex faults within 30 business days. The NSW Public Lighting Code defines Complex Faults as Faults related to Repairs not subject to an Excluded Fault Condition:

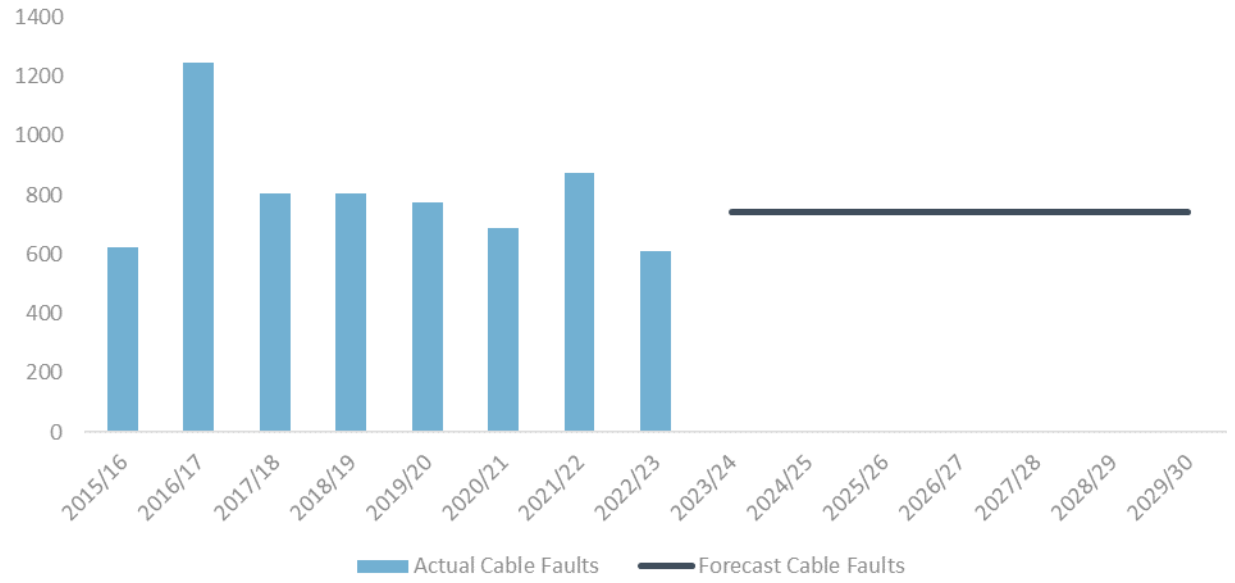
- Where a site-specific traffic management plan and an additional dedicated traffic control crew are required; and/or

- Where a site-specific Road Occupancy Licence or other specific authority for road occupancy is required; and/or
- Where identification of an underground fault is required; and/or
- Where access to private property is required.

This change in service standard is not expected to result in any changes to the underlying cost to complete reactive cable repairs, particularly following removal of the GSL scheme. This change will however enable SA Power Networks to manage completion of cable faults more effectively with our external contractors, with the 30 business day repair service standard included within our contractual performance standards for complex faults.

We have forecast cable faults at a rate of around 741 faults per year, consistent with the historical trend for cable faults, for the 2025–30 RCP as demonstrated in Figure 4.

Figure 4: Annual cable faults for the current period and future period



Customers also continued to support our proactive (planned) cable replacement program. Planned cable replacement is proposed where multiple faults have occurred on the same section of cable, and patching is no longer considered viable. Consistent with our SCS practices, the cable is replaced when three or more faults have been recorded on a single section of cable. SA Power Networks forecasts to replace approximately 22.5 kilometres of public lighting cable over the 2025–30 RCP, representing less than 0.8 percent of the total length of public lighting cable.

3.4.4 Luminaire maintenance

Luminaire maintenance revolves around three key processes:

- the reactive repair of lights on failure via the SLO system;
- any planned bulk replacement activities; and
- the testing and cleaning of LED public lighting installations.

Public lighting faults are reported by customers through our online SLO reporting tool or by phoning our call centre. Field crews attend the relevant site with the aim of rectifying all faults within five business days for metro areas and 10 business days for regional areas. Following customer consultation, we propose to update

the proposed service standards for SLO, where all simple faults will be repaired within 5 business days and complex faults within 30 business days.

Faults may be associated with the lamp, PE cell, wiring or the luminaire. Crews carry spares when attending faults to reduce the need for a second visit to rectify the fault. For SLO maintenance, we utilise a services contract in the metro area (which has a higher density of lights) and local depot staff in regional areas (which has a lower density of lights), with this mix providing the most efficient outcome for public lighting customers.

Historical fault data has been used to forecast future failure rates for luminaires and their components. We have updated failure rates for HID lights to apply an average failure rate across all lights given reduced maintenance and increasing age rated failures.

As more lights transition to LEDs, it is becoming harder to source older lamp types due to obsolescence. There are also environmental concerns preventing the continued manufacture of some lamps, for example mercury vapour. As part of our engagement program, we consulted with customers about prolonging lamp replacements. Prolonged lamp replacement will involve:

- upgrading side mounted HID lights with LEDs on lamp failure;
- using available lamp stock for post top / decorative SLOs, where LED upgrades are not easily achieved; and
- working with customers to develop LED upgrade solutions for post top / decorative lighting.

No bulk lamp replacement program is included within SA Power Networks 2025–30 proposal and this approach was supported by 86 percent of customers.

SA Power Networks has been installing NEMA PE cells on LEDs, with an initial expectation these PE cells would have a useful life of 20 years consistent with the LED luminaire. We have recently noticed an increase in PE cell failures associated with LEDs, which suggests that the NEMA PE cells are unlikely to last for the expected 20 years. Therefore, we propose to include a PE cell bulk replacement program for 2025–30. We propose to complete this bulk replacement while on site to complete the scheduled 10-year LED cleaning. This results in a small incremental cost to cover the replacement PE cell and time on site. We discussed this proposal with the PLWG on 22 November 2023, with the PLWG generally supporting this approach as being prudent and efficient.

SA Power Networks commenced testing approximately 9,000 LEDs located across metropolitan, industrial, Adelaide hills, coastal and regional areas in South Australia in 2021. The luminaires selected for testing had been installed for four years and were entering their fifth year of operation. The purpose of this testing is to understand the deterioration in LED light output over time and when cleaning may be required. The testing was repeated in 2022, and again in 2023, for the same batch of luminaires. Further results are required to inform likely cleaning requirements. Throughout the testing program we have identified a number of failed luminaires, dim luminaires and those blocked by vegetation with work orders raised for replacement or remediation. 76 percent of public lighting customers supported the continuation of the LED testing program for the 2025–30 RCP.

We also propose to continue to retain a 10-year cleaning program for LED lighting. Industry evidence indicates that LEDs will need cleaning over their lifetime, with the time between cleans influenced by local factors, such as light spacing, height and environmental conditions where the luminaire is installed. Our customer engagement indicated there was equal support for applying a 10-year clean or delivering cleaning as a quoted service. We note one council suggested the cycle should be less than 10 years for lights close to the coast. Noting this feedback, on balance we propose to retain a 10-year cleaning cycle in our 2025–30 proposal, consistent with the current period. This will minimise price variations associated with changes in the cleaning cycle.

4 Form of control mechanism

As mentioned above, the AER proposes to apply caps on the prices of individual services (price caps) for ACS in the 2025–30 RCP, in accordance with clause 6.2.5 of the NER.

The basis of the control mechanism is the method used to calculate the prices to be set for a group of services. The basis of control has been built into the pricing models developed for each service as follows:

- **Services charged on a fixed fee or quoted basis** – A formula-based approach (based on historical cost-build up) will be applied in the first regulatory year and then a price path for the remaining regulatory years of the 2025–30 RCP.
- **Public lighting services** – A building block approach has been applied for the 2025–30 RCP.

SA Power Networks has proposed prices and pricing parameters that comply with the AER's pricing control mechanism and formula set out in the final F&A. The X-factors for the 2025–30 RCP will reflect the change in annual prices (on top of Consumer Price Index (**CPI**)) as detailed in our pricing models. The proposed X-factors for ANS are set out in **Supporting Document 15.1.1 – Standardised ANS Model**. We propose an X factor of zero for public lighting, with price smoothing applied as provided in Supporting Document **15.2.1 – Public Lighting Pricing Model**.

SA Power Networks will demonstrate compliance with the pricing control mechanism and formula for ACS by proposing prices that comply with the formula in its Annual Pricing Proposal for each year of the 2025–30 RCP.

4.1 Fee based services

The price cap formula to be applied to legacy metering, public lighting and ancillary fee-based services is as follows:

$p_t^{-i} \geq p_t^i$ i=1, …, n and t=1, 2, 3, 4, 5

$p_t^{-i} \geq p_{t-1}^{-i} \times (1 + \Delta CPI_t) \times (1 - X_t^i) + A_t^i$

Where:

t is the regulatory year with t = 1 being the 2025/26 financial year.

p_t^{-i} is the cap on the price of service 'I' in year t.

p_t^i is the price of service 'I' in year t. The initial value is to be decided in the distribution determination.

p_{t-1}^{-i} the cap on price of service 'I' in year t-1.

ΔCPI_t is the annual percentage change in the Australian Bureau of Statistics' (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities[13] from the December quarter in year *t*–2 to the December quarter in year *t*–1. For example, for the 2025/26 year, t-2 is December 2023 and t-1 is December 2024.

X_t^i is the X factor for service 'I' in year t. The X factors are to be decided in the distribution determination.

[13] If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

A_t^i is the sum of any adjustments for service 'I' in year t. To be decided in the distribution determination.

4.2 Quoted services

The price cap formula we propose to apply to quoted services is as follows:

Price = Labour + Contractor Services + Materials + Margin + Tax

Where:

t the regulatory year with t = 1 being the 2025/26 year.

Price the charge paid by the customer.

Labour the labour costs directly incurred in the provision of the service which may include labour on-costs, fleet on-costs, and overheads. Labour is escalated annually by $(1 + \Delta CPI_t)(1 - X_t^i)$ where:

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities[14] from the December quarter in year t–2 to the December quarter in year t–1. For example for the 2025/26 year, t-2 is December 2023 and t-1 is December 2024.

X_t^i is the X factor for service 'i' in year t. The X factor is to be decided in the distribution determination and will be based on the approach the distributor undertakes to develop its initial prices.

Contractor Services reflect all costs associated with the use of the external labour including overheads and any direct costs incurred. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred are passed on to the customer.

Materials reflect the cost of materials directly incurred in the provision of the service, material storage, logistic on-costs and overheads.

Margin definition to be decided in the distribution determination.

Tax definition to be decided in the distribution determination.

SA Power Networks proposes to continue to apply a margin of 6 percent to quoted services, consistent with the margin applied in the current 2020–25 RCP price cap formula for quoted services.

[14] If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

Glossary

Acronym / term	Definition
ACS	Alternative Control Services
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
ANS	Ancillary Network Services
B2B	Business to Business
CLER	Customer Light Equipment Rate
CPI	Consumer Price Index
DIT	Department for Infrastructure and Transport
DNSP	Distribution Network Service Provider
EDC	Electricity Distribution Code
EO	Energy Only
ESCoSA	Essential Services Commission of South Australia
F&A	Framework and Approach
GIS	Geographic Information System
GSL	Guaranteed Service Level
HID	High Intensity Discharge
LED	Light Emitting Diode
NER	National Electricity Rules
NMI	National Metering Identifier
PE	Photo Electric
PLC	Public Light Customer
PLWG	Public Lighting Working Group
RCP	Regulatory Control Period
RTI	Retailer Temporary Isolation
SCS	Standard Control Services
SLO	Single Light Out
SLUOS	Street Light Use of System
TFI	Transferred Infrastructure