

Public Lighting Forum

Tuesday 4 November



Empowering South Australia



Acknowledgement of Country

SA Power Networks acknowledges the multiple Traditional Owners of the lands that host the South Australian electricity network and their connections to land, sea, and community. We would also like to pay our respects to all First Nations peoples past and present, acknowledging their deep connection to Country, Culture and Community.

Connection With Country, 2025 by Kelly Taylor & T'Keyah Ware

AGENDA

10am	Welcome and Public Lighting Update Sally Silz
10:15am	ESCoSA Reporting Requirements Claire Stobbe
10:35am	Asset Management Overview Claire Stobbe/Lachlan Keller
11:15am	Lighting Data Management and Portal Claire Stobbe
11:30am	EV Chargers and Facilities Access Portal Anthony Mibus/Daniel Pain
12pm	Metering – Type 7/9 Louise Kelly
12:30pm	Open Discussion Questions from the room
1pm	Lunch and Networking
2pm	CLOSE



Customer Solutions Insight

Sally Silz - Connections
Development Manager South &
Lighting Services



Customer Solutions – functional structure



Customer & Strategy
Jess Morris



Customer Solutions
Brendon Hampton



Major Connections
Ed Senneck

Manage Major Customer accounts and projects

- Manage relationships with major customers
- Manage major, complex connection projects including large scale renewables



Connections North
Ntuthuko Tshuma

Deliver geographically based connection and asset relocation services

- Field scoping, design, offer development, customer management and delivery of new/upgraded connections.
- Provision of non-contestable lighting services for LGAs, DIT, developers, private customers etc.



Connections South & Lighting Services
Sally Silz



Energy Services
Jaclyn Tume

Provide centralised connection and energy related services

- Manage provision of high-volume connections and energy services
- Desktop scoping
- Small and Medium embedded generation

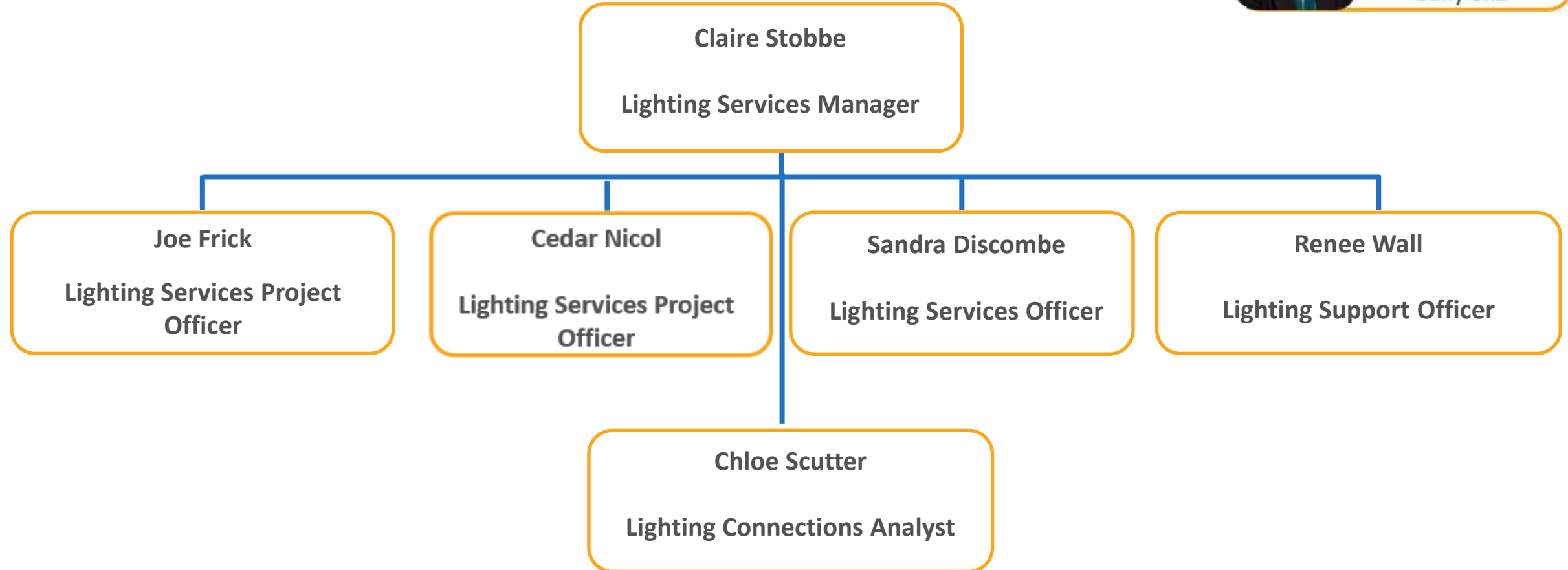
Complex, customised ←

→ High volume, transactional

Customer Solutions – functional structure

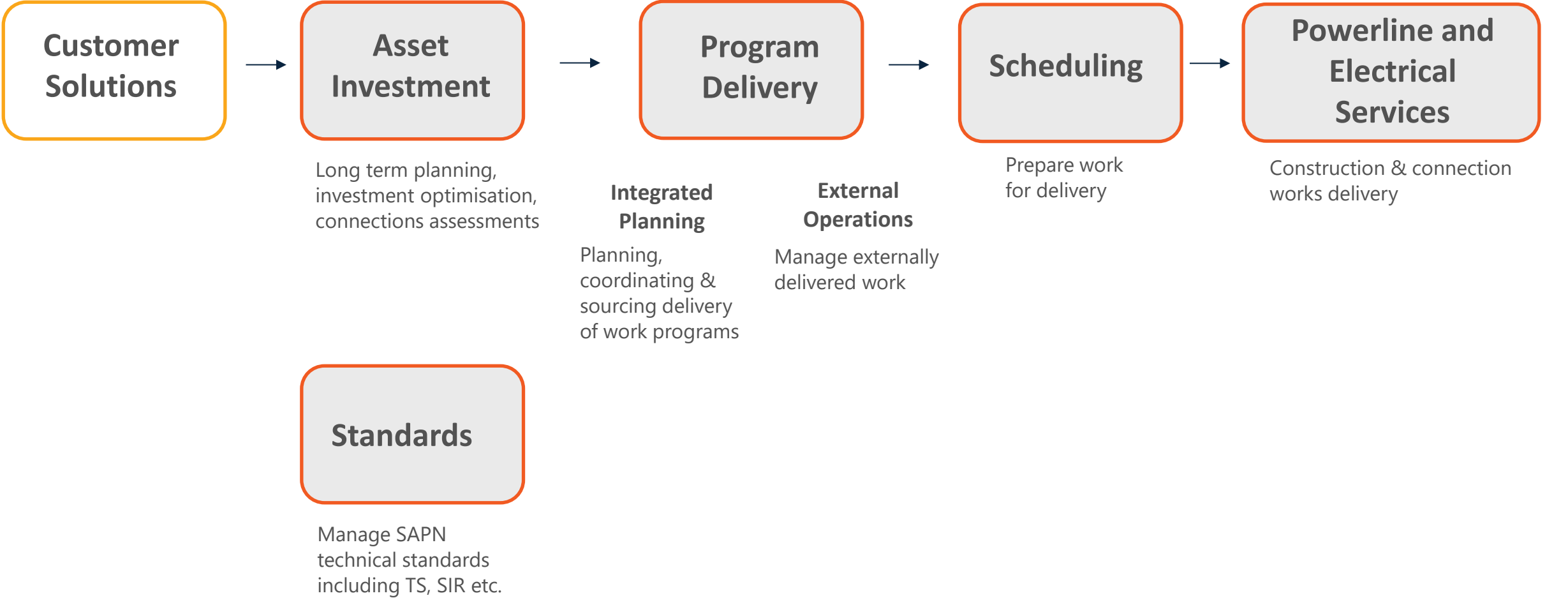


**Connections
South & Lighting
Services**
Sally Silz



We partner with teams across SA Power Networks

For example:



Taking a systems approach

Culture

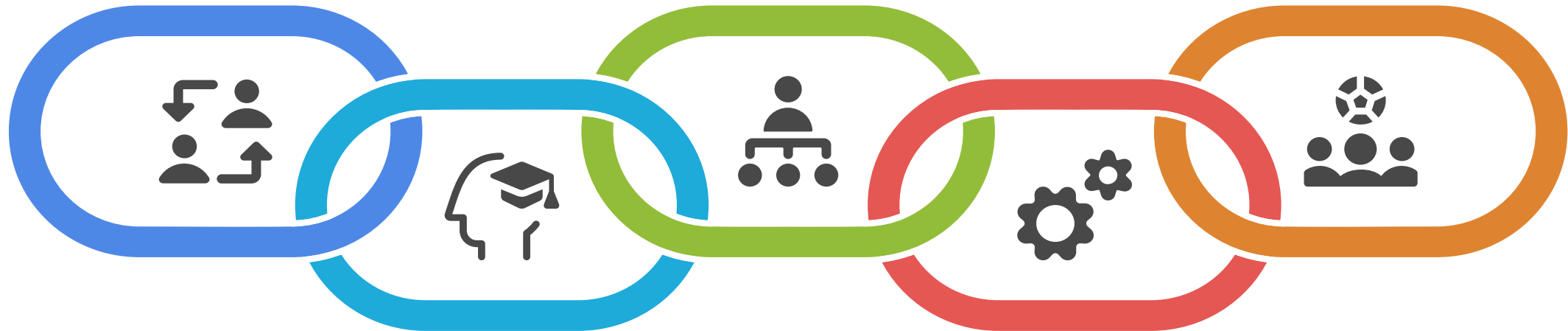
Shared values and beliefs that shape behaviour and ways of working

Structure

Defining clear accountabilities, roles and responsibilities.

Stakeholders

Stakeholders' needs at the heart of what we do



Capabilities

Skills and competencies that drive performance.

Processes and Systems

Efficient, and consistent operations and workflow.

Customer Solutions Team Charter **Snapshot**



Who are we?

We develop and deliver industry-leading energy solutions that empower the energy needs of our customers, the community and the South Australian economy.

Customer Solutions is dedicated to providing efficient, reliable, and innovative energy solutions for customers.

We act as key representatives of the business, guiding customers through the connections process, advocating for their interests, providing trusted technical advice, developing cost-effective solutions and managing the delivery of energy services, while supporting the growth and development of the state.

Our customers span residential, commercial, industrial, renewable energy, and key infrastructure sectors. We work across the business and across multiple industries to enable the delivery of services that customers value.

Our motivations



Our work is not only rewarding but also impactful, as we contribute to the broader community and create a lasting legacy for South Australia.



We pride ourselves on being a collaborative and supportive team, with diverse skills and backgrounds, who work together to solve problems and deliver excellence in customer and technical services delivery.



The variety of work we engage in keeps our roles interesting, offering good career and professional development opportunities.

Our values

we keep everyone *safe*

we collaborate with *purpose*

we take the *initiative*

we rise to the *challenge*

How we demonstrate these values

We care for each other, share knowledge and ideas, and celebrate our success



People

We collaborate with our internal and external partners to deliver win-win outcomes



Partnerships

We take accountability for delivering service excellence and finding better ways to do things



Excellence

We act with integrity, embrace change and take on challenges



Courage

We take pride in our work and understand our important role in the community



Purpose



Priorities 2025 – 2026

People

- Clear cultural expectations and hiring practises → Team Charter
- Upskilling e.g. communications, project management
- Build trust with customers and other stakeholders

Processes and Systems

- Visibility and accessibility
- Streamlined end-end
- New portal (Connections)
- New documents e.g. Offer letters

Management

- Clear KPIs – performance culture
- Accountability model
- Project management model
- Account and Portfolio Management
- Service Governance

ESCOSA Reporting

Claire Stobbe – Lighting Services Manager



ESCOSA Scheme Change 1 July

From 30 June 2025, ESCOSA will remove the requirement for SA Power Networks to make Guaranteed Service Level (GSL).

From 1 July 2025, the time it takes to repair faulty street lights will depend on how complex the job is:

- Simple repairs – We aim to fix these within 5 business days, no matter where the light is located (including rural and regional straightforward faults, like replacing a globe or fixing wiring.
- More complex repairs – These may take up to 30 business days to complete. This applies when:
 - Special traffic control plans or extra crews are needed to work safely on busy roads
 - We need permission to close or access certain roads
 - The problem involves underground cables or equipment
 - We need to access private property to complete the repair

ESCoSA Reporting Engagement

- First workshop with council representatives – Tuesday 26 August
- Workshop Objectives:
 - Alignment on how we report streetlight outage performance.
 - Discussion on what transparency and value looks like.
 - Development of a sustainable reporting format that works for all 68 councils and DIT.
 - Preparation for quarterly reporting starting October 2025.
- Second workshop held on Monday 27 October
 - Reporting prototype shown to group
 - Review completed and improvement suggestions gathered



ESCOSA Reporting Requirements

Repair Timeframes:

- Simple Repairs – within 5 days
- Complex Repairs – within 30 days (statewide target)

Fault Classification:

- Street Light Fault Type
- Repair Type (Simple vs Complex)

Accountability:

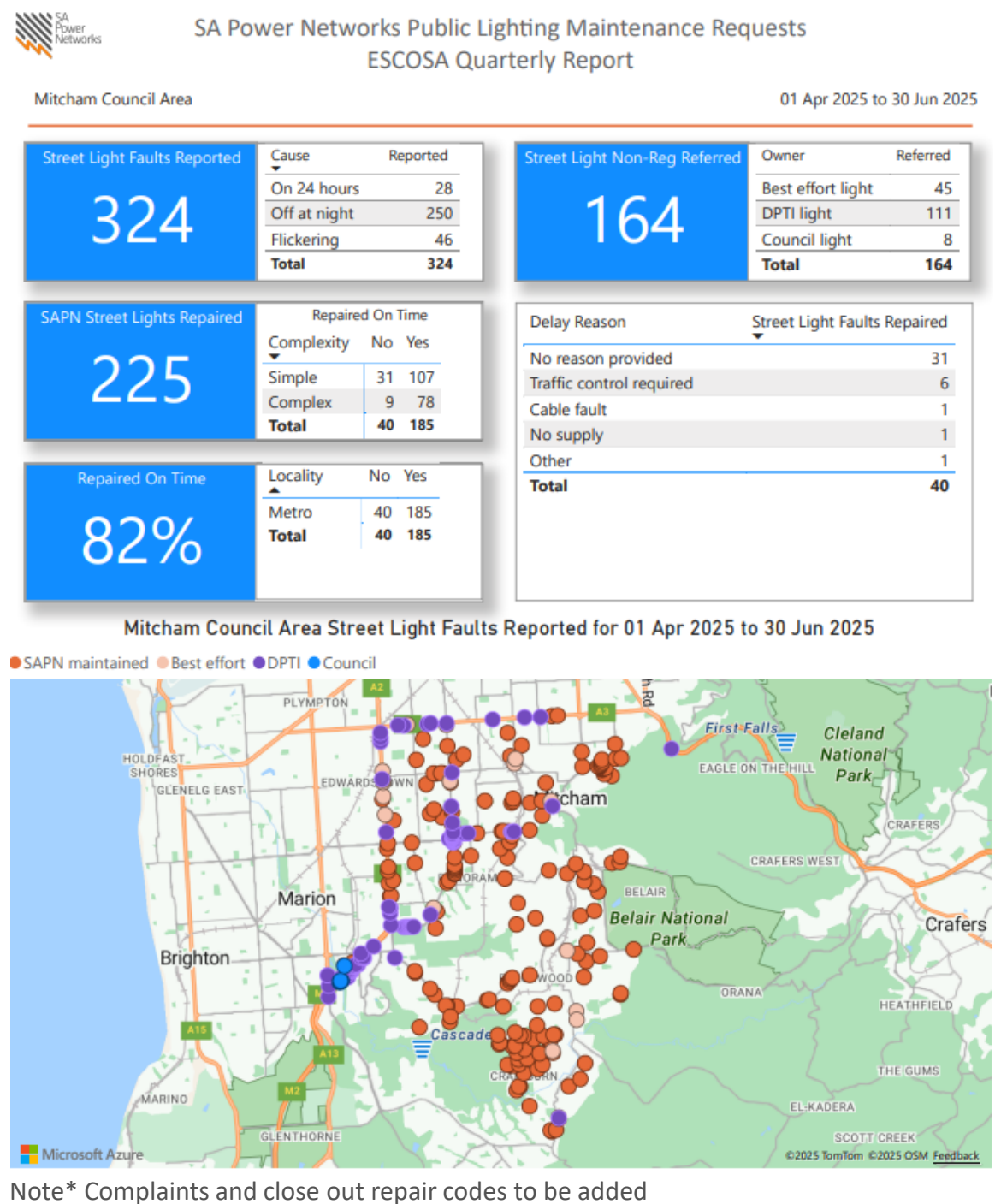
- SAPN Responsibility: Repairs completed (Simple vs Complex)

Performance Tracking:

- On-time Repairs
- Customer Referrals

Exceptions & Insights:

- Delay Reasons
- Customer Complaints



Next steps

- Develop portal functionality
- Improve transparency for councils
- Enhance communication capability within portal (SLO follow up etc)



Asset Management Overview

Lachlan Keller – Operational
Asset Management Engineer

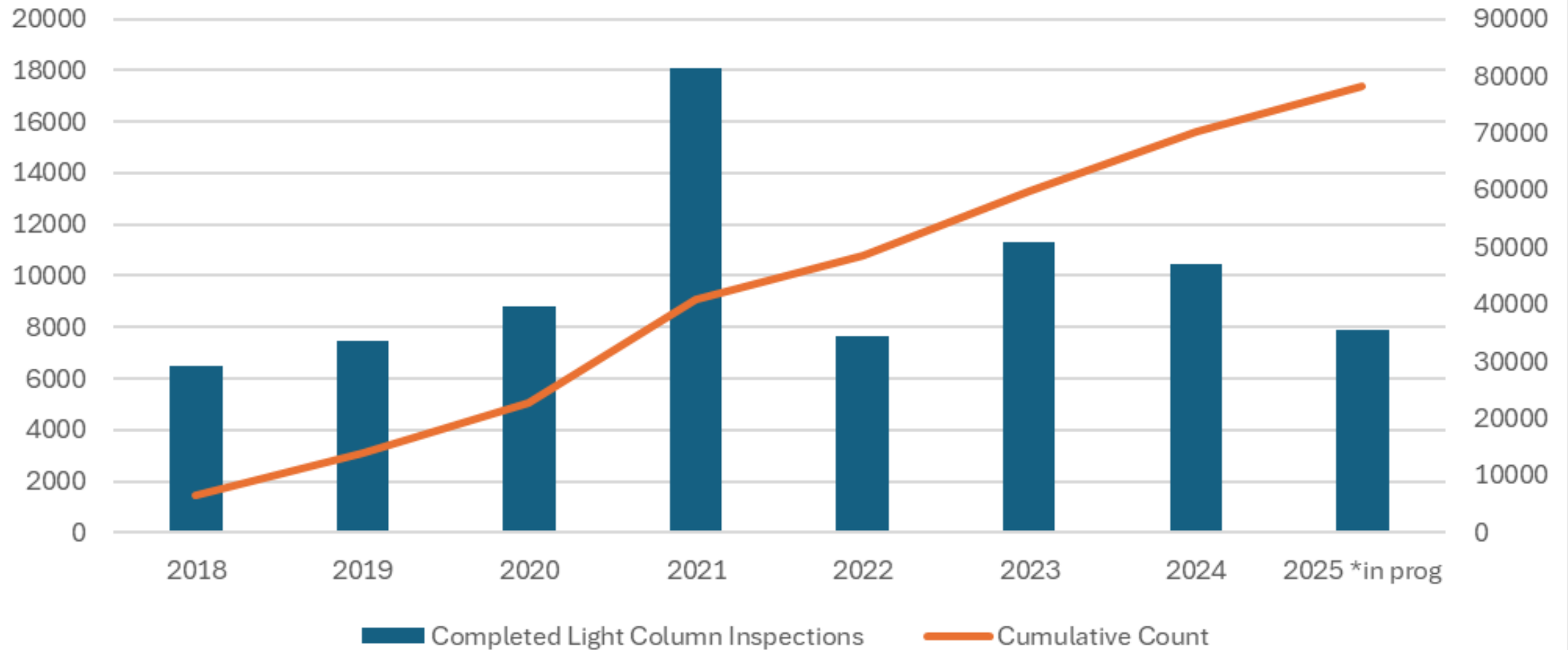


Column Inspections

- Current Population approx. 78,000 (earliest installation 1956)
- Inspections commenced 2018
- Inspection Frequency
 - High corrosion zones – 5 years
 - Low corrosion zones – 10 years
- Anticipate completion of full cycle at the end of 2027
- Typical failure mode at or just below ground level (corrosion)
- Prior to 2018 approx. 60 column failures per year
- Current failures reduced to < 6 per annum



Completed PLC Inspections



Defect Focus - Condition Rating Assessment



Extreme
Hole in the
column



Very High
Significant
deteriorations
and corrosion



High
General
corrosion

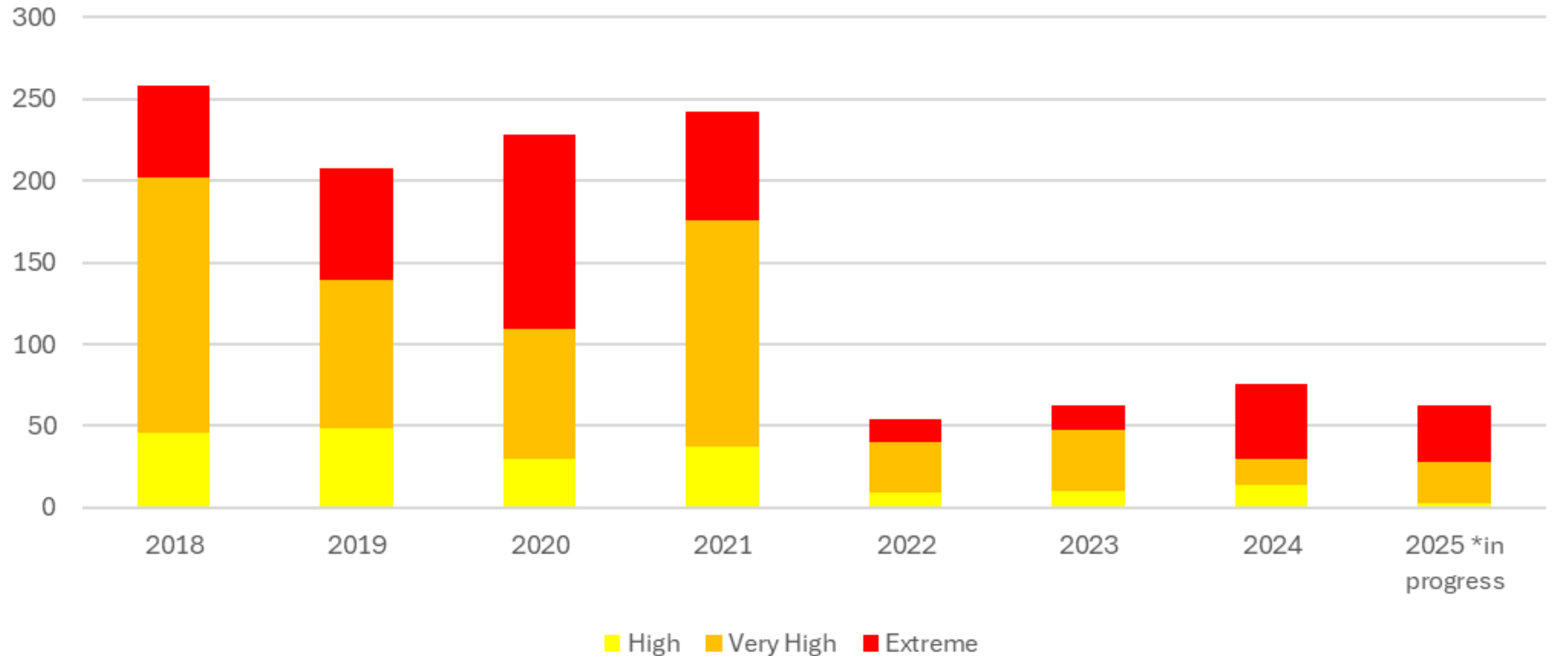


Moderate
Minor
corrosion

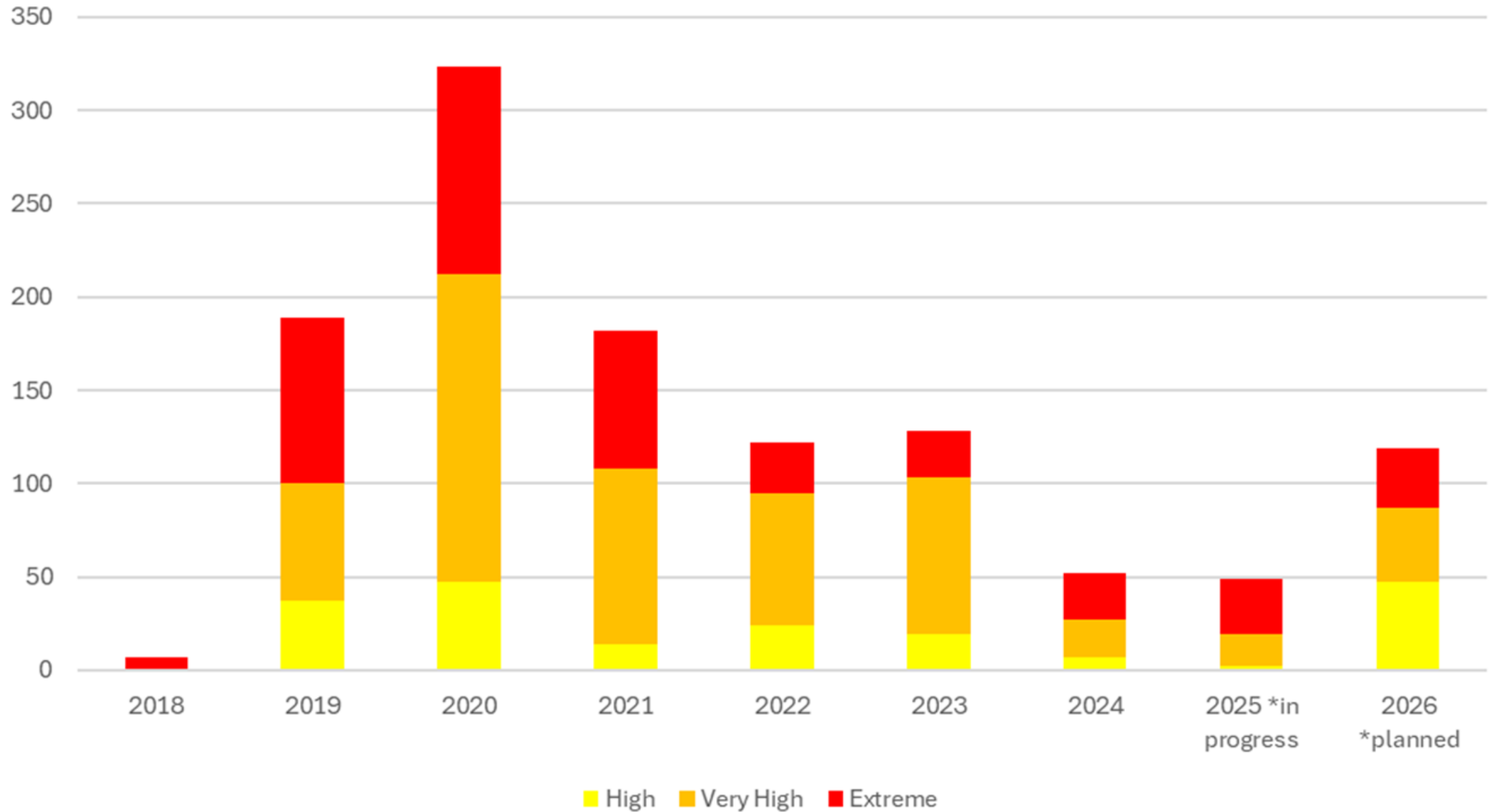


Low
Signs of
corrosion

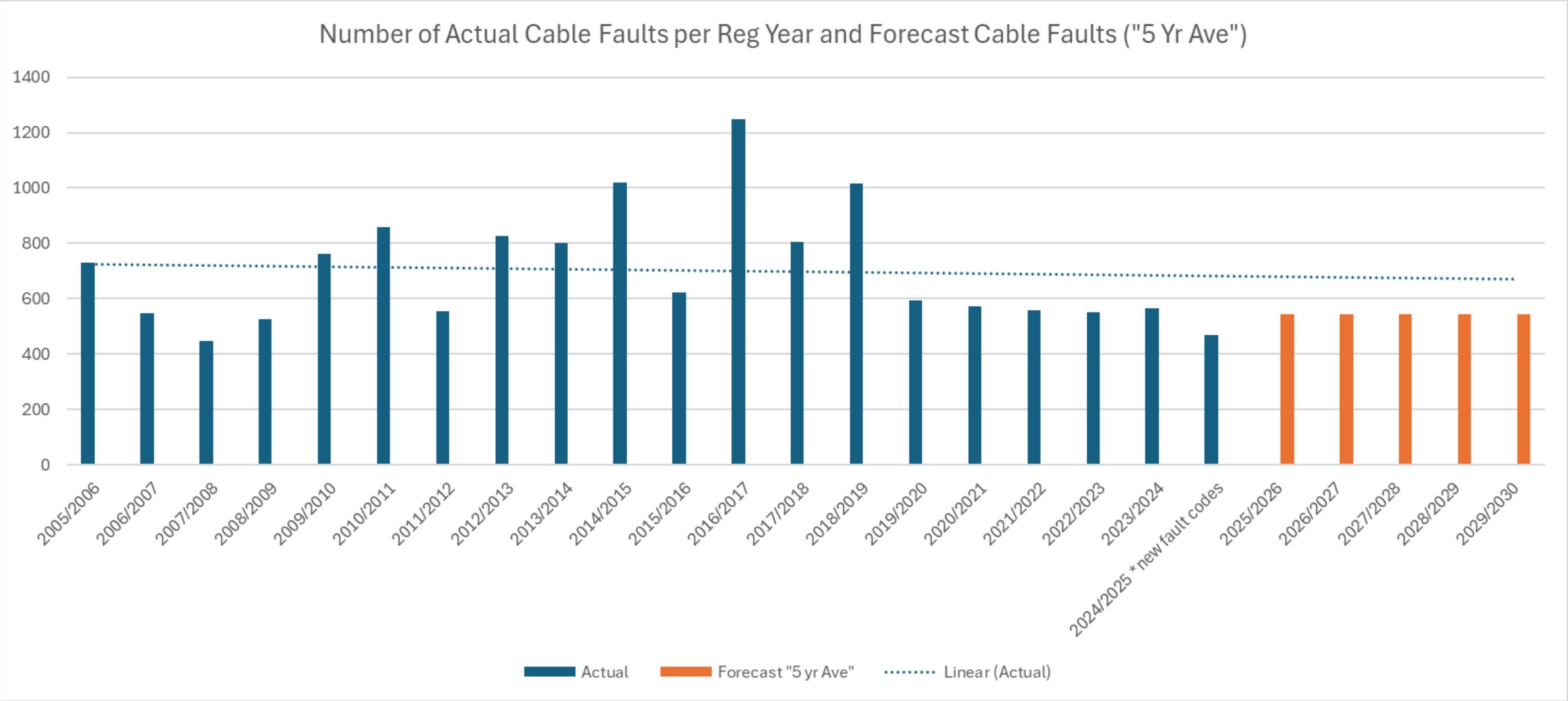
PLC - Defect Notifications Raised from Inspections



PLC - Completed Defect Notifications



Cable Faults



Cable Replacement Projects - Planned

- Completed
 - Sportsmans Drive, West Lakes
- Construction Underway
 - Brebner Drive, West Lakes
 - Turner Drive, Craigmore
- Proposed Pipeline for completion in 2025/26 (subject to construction quotes and passing Financial Assessment Benchmarks)
 - Hamblynn Rd, Winkle St and Leonard Cr, Elizabeth Downs
 - Frith Rd and Blair Park Dr, Craigmore
 - Atlantis Drive, Golden Grove
 - Kinkaid Rd, Grayling and Worthington Rd, Elizabeth East
 - Tilley Drive, Yanakie Ave, Yurlondi Drive and Yangoura Ct, Surrey Downs



LED Testing Update

Testing commenced 2021 ~9,650 luminance measurements p.a.

- LEDs installed for at least 4 years entering fifth year of operation (in 2021)
- Located in coastal
- Industrial; and
- Urban environments

The same luminaires are tested each year to track performance

Testing completed in 2025 – approx. 48,000 data points (for luminance)

During the period of evaluation variations at some sites (which requires the data to be cleansed)

- LEDs failed and switched out
- LEDs upgraded/down graded upon customer request eg 22W to 17W
- New sources of illumination at the measurement site
- Growth/Removal of vegetation around luminaires
- Vehicle positioning relative to the luminaire
- Consideration of instrument accuracy and subsequent variation
- Outliers
- Potential impact of moon phase change

In the process of cleansing data to establish trends, data team has been engaged



Lighting Asset Construction

Claire Stobbe – Lighting Services Manager



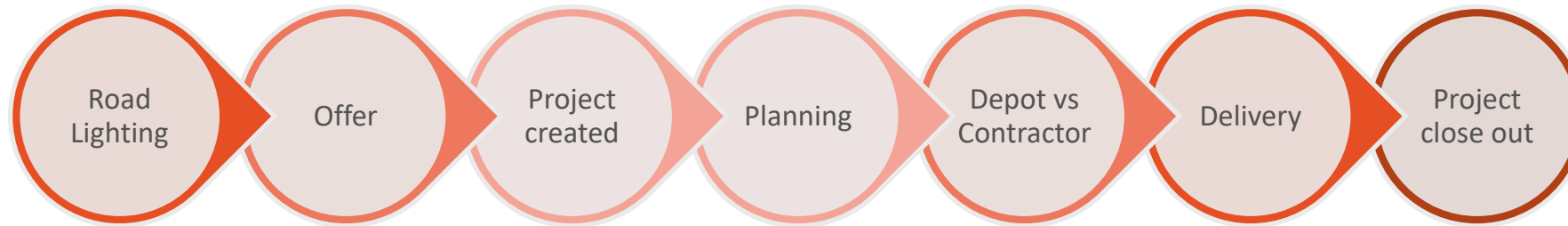
Lighting Asset Construction

- Regulated lighting assets on SAPN network AS1158
- Non-regulated assets AS3000 (UMS or Metered)
- Non-contestable and contestable works
- Tariffs and Responsibilities
- Vegetation around lighting assets
- Lighting Documents

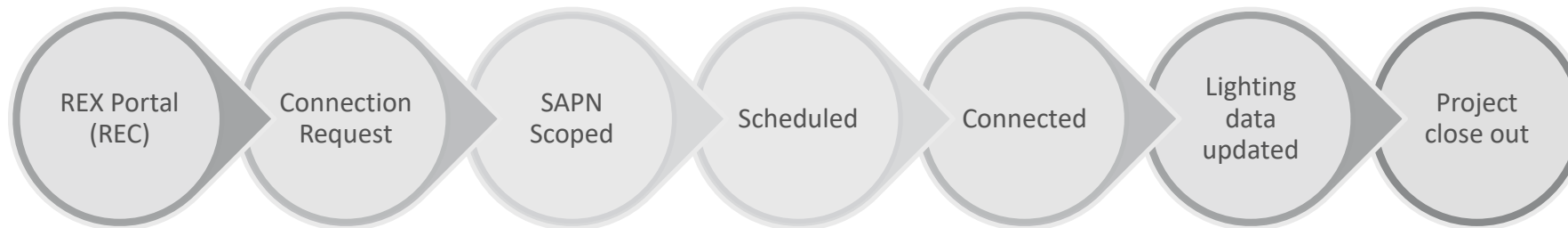


Lighting Asset Construction

Regulated Lighting Assets on SAPN Network – SAPN Construction



Non-Regulated Lighting Asset Connection – Customer Construction



Non-Regulated Asset Supply Connection (Customer Construction)

- Unmetered Lighting Assets AS3000, new, upgrade or removal of customer owned lighting assets

Street light connection service

DIT, Councils and Developers can apply for new street lighting to be connected to our network and will need to provide the following information to complete the application:

- › Valid contractor's license number
 - › The address of the lighting connection
 - › The invoice billing address
 - › The customer's and electrician's contact details (e.g. mobile and email address)
 - › Maximum demand of the installation
 - › The type of lighting connection you need
- SAPN to ensure new or upgraded lighting assets are AEMO approved to update the billing database under UMS, these are energy billed via the Retailer.
 - Metered lighting assets can be of Customer choice, these assets can be on SLO reporting (tariff) or not SAPN responsible (no tariff), these assets are metered billed via the Retailer.

Non-Contestable and Contestable Project Delivery Overview

Projects that are inclusive of both SAPN and Customer Infrastructure:

- Non-Contestable works delivered by SAPN
- Contestable works delivered by Customer appointed Contractor
- Delivery partner is determined by SAPN Planning and Depot Capacity.
- Focus on efficiency and collaboration with Customer Contractor

Assets, Tariffs, Responsibilities and Services

SAPN Infrastructure

Service Category	Description	Ownership	Installation / Replacement	Operation and Maintenance
SAPN / SLUoS	SA Power Networks funds luminaire / infrastructure installation or upgrade	SA Power Networks	SA Power Networks	SA Power Networks
TFI	Lighting luminaire / infrastructure is transferred ('gifted' or 'vested') to SA Power Networks	SA Power Networks	SA Power Networks	SA Power Networks
PLC	Customer funds the luminaire installation or upgrade, which SA Power Networks installs. SA Power Networks funds the installation and upgrade of infrastructure. SA Power Networks maintains assets over their life.	Public Lighting Customer (Luminaire) SA Power Networks (Infrastructure)	Public Lighting Customer (Luminaire funding) SA Power Networks (Infrastructure funding, all installations)	SA Power Networks

ESCOSA Performance Target Applicable

Customer Infrastructure

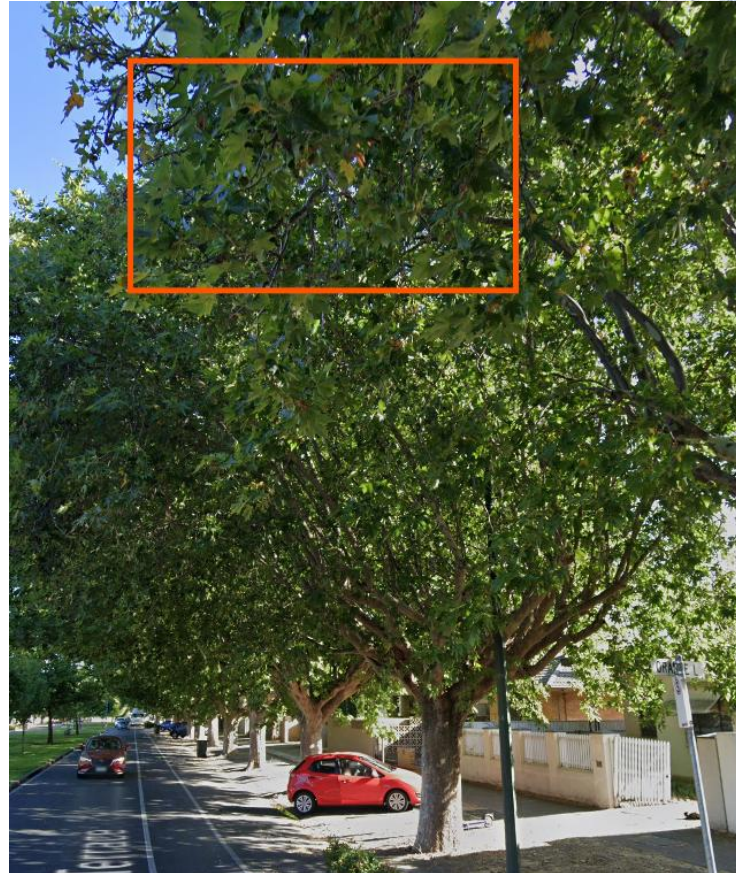
Service Category	Description	Ownership	Installation / Replacement	Operation and Maintenance
CLER	Customer funds all public lighting assets SA Power Networks maintains assets over their life	Public Lighting Customer	Public Lighting Customer	SA Power Networks (minor components)
EO (Energy Only)	Customer funds and retains ownership of all public lighting equipment and maintenance responsibilities (unmetered)	Public Lighting Customer	Public Lighting Customer	Public Lighting Customer
SLO Reporting	Customer funds and retains ownership of all public lighting equipment and maintenance responsibilities (metered)	Public Lighting Customer	Public Lighting Customer	Public Lighting Customer

Best Endeavour Service Repair (Non ESCOSA)



Vegetation Around Lighting Assets

- SAPN crews will trim for access to the light but not clear vegetation for light compliance to the road
- The tree owner (being Council or private) are responsible to clear vegetation around light
- SAPN responsible for trimming/clearing vegetation around powerlines



Lighting Documents

ATTACHMENT A GENERAL CONDITIONS	
The Customer and SAPN (together "the Parties") agree as follows:	
OPERATIVE PROVISIONS	
1	THE AGREEMENT
1.1	The Tariff Agreement comprises the following contract documents:
1.1.1	the Transition Letter;
1.1.2	these General Conditions and the Annexures to these General Conditions;
1.1.3	the Other Attachments and the Annexures to the Other Attachments; and
1.1.4	such other terms and conditions as agreed in accordance with the process for amending the Tariff Agreement as set out in the Transition Letter.
1.2	Except where otherwise indicated, in the event of any inconsistency between the documents which comprise the Tariff Agreement, the order of precedence is as set out in clause 1.1 of the General Conditions.
1.3	Where the PLC LED Tariff applies, or SAPN is to supply and/or install the luminaires under the TFI LED Tariff, the Parties acknowledge and agree that:
1.3.1	the terms and conditions of the Construction Agreement will apply to the supply and/or installation of the Luminaires until energisation, after which the Construction Agreement will cease to apply except for those clauses of the Construction Agreement, which are intended to survive expiration or termination of the Construction Agreement (including but not limited to the payment of the Fee by the Customer under a Letter of Offer); and
1.3.2	from the time of energisation, the Services will be provided to the Customer by SA Power Networks in accordance with the Tariff Agreement.
2	PARTY OBLIGATIONS
2.1	In relation to this Tariff Agreement, each Party agrees and is responsible for (at its sole cost):
2.1.1	conducting such asset, legal, financial and tax due diligence investigations which it may reasonably consider necessary or desirable; and
2.1.2	obtaining all necessary internal approvals; and



Technical Standard - TS101

Public Lighting - Design and Installation
Published - 17 July 2023



SA Power Networks Connections & Ancillary Network Services 2025/26 Manual No. 18

Published: June 2025



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PUBLIC LIGHTING TARIFF MANUAL. Manual No. 21

Published: June 2025



NICC402

Public Lighting - Ownership & Approval Process
Published 26 February 2023



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Schreder Update

- StreetLED17 and LED20 Mk4 transition Q1 2026
- Pressure die cast aluminum body natural finish
- Accessories include:
 - 5-degree tilt spigot adaptor, rear, front and pathway glare visor available
- 3000k vs 4000k standard

SYLVANIA STREETLED MK4



Energy Savings

The StreetLED MK4 product offers significant energy savings compare to StreetLED MK3 and reduction in inventory and SKU count.

- StreetLED3 17W to StreetLED4 14W – Savings 3 Watts
- StreetLED3 24W to StreetLED4 20W – Savings 4 Watts

Environmental Benefits

The StreetLED Mk4 features a Natural finish (unpainted pre-treated) with a proven design life in excess of 20 years providing environmental benefits as follows:

- Eliminate the need for paint solvents and energy-intensive application and drying process.
- Easier recycling, eliminate the need for paint removal and release of pollutants.
- Sustainable approach, reducing CO2 emissions.

Lighting Data Management and Portal

Claire Stobbe



Lighting Data Management and Portal

Lighting Data Sources & Systems

- SAP: asset and tariff billing, SLO, cloud connector to Portal, energy billing
- October error sources: retailer energy billing and tariff inconsistencies

Billing Type	Assets	Errors	Error rate
Energy	244,857	91	0.04%
Tariff	249,930	973	0.4%

Data Collaboration & Development

- LGA working group established for data alignment and industry agreement — PLP developed as an outcome
- Billing updates derived from SLO crews, project completions, and customer requests via Portal or email
- Collaboration is essential to maintaining the accuracy and reliability of the database.



SAP Billing System

Category	Service Description	Code	Light	2025/26 Price (GST Exclusive)	2025/26 Price (GST Inclusive)	PVL
SAPN		LED105	Aldridge LED 105W*	\$210.01	\$231.01	\$1,944.00
		LED198	Aldridge LED 198W*	\$210.01	\$231.01	\$1,944.00
		LED150	Sylvania RoadLED 150W*	\$136.16	\$149.78	\$963.00
		LED175	Sylvania RoadLED 175W	\$154.49	\$169.94	\$1,207.00
		LED80	Sylvania RoadLED 80W*	\$136.16	\$149.78	\$963.00
		LED60	Sylvania RoadLED 60W*	\$132.88	\$146.17	\$920.00
		LED155 TM	Parkville 155W	\$191.47	\$210.62	\$1,698.00
		LED81 TM	Parkville 80W	\$186.58	\$205.24	\$1,633.00
		LED101 TM	Parkville 100W	\$189.02	\$207.92	\$1,665.00
		LED58	RoadLED Midi 60W	\$132.81	\$146.09	\$919.00
		LED78	RoadLED Midi 80W	\$135.98	\$149.58	\$961.00
		LED151	RoadLED Midi 150W	\$136.33	\$149.96	\$966.00
		LED180 F	Kanon 180W Flood	\$197.53	\$217.28	\$1,773.00
		LED360 F	Kanon 2x180W Flood	\$289.97	\$318.97	\$3,004.00

* Non-standard or non-modern luminaire
^ Available by SA Power Networks approval only

Display Equipment : Characteristics

Class overview

Measuring points/counters

Equipment

70139883

Category

L

Lighting Assets

Description

Light

Status

INST

INSV DQEE

Valid From

24.01.2019

Valid To

31.12.999

Organization

Structure

Documents

Sales and Distribution

Characteristics

Classification

Lamp Type

LED80

Luminaire Type

Sylvania RoadLED Midi 80W

Customer Type

COUNCIL

Billing Customer

CITY OF SALISBURY

Reference Customer

Tariff

SAPN

Bracket Type

PE Cell Type

Shield

Billing Cycle

MONTHLY

Light Energy Billing

Yes

Unique GIS ID (G3E_FID)

12557018

Latitude

-34.765223392000003

Longitude

138.67936924809001

Aeroscreen

UNKNOWN

Facility Owner

DLC

Job Number

NMI NUMBER

DIT Road

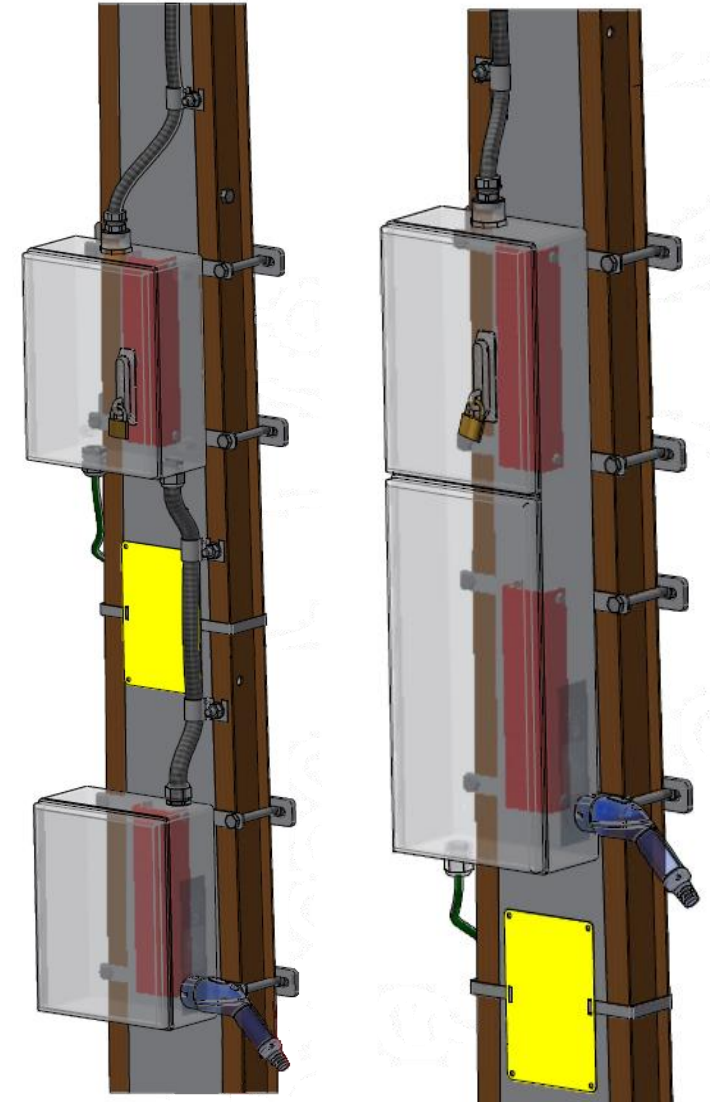
EV Charging Infrastructure and Facilities Access Portal

Anthony Mibus and Daniel Pain



Electric Vehicle Charging (EVC) on Poles

- SAPN holds Facilities Access Agreement with one EVC provider, and in final negotiations with another
- Several trial sites identified for future deployment
- Typical mounting drawings have been developed to guide applicants on appropriate positioning and attachment requirements
- Each EV charger and site design requires approval from SAPN in addition to FAA and site licence
- A council driven approach is preferred, as EVC locations need to be approved by Council re parking requirements (designated EV parking, time limits etc)
- SA Power Networks is working with several Councils on pole mounted EVC locations



EV Charger application process

- Customer is required to sign up to Facilities Access Agreement with SAPN
 - T&C's
 - Pole rental pricing
- Selection of desired EVC pole locations
- SAPN initial review
 - Pole condition
 - Conflicting hardware on pole
 - Proposed design
 - Metering arrangements
- Connection capacity evaluation

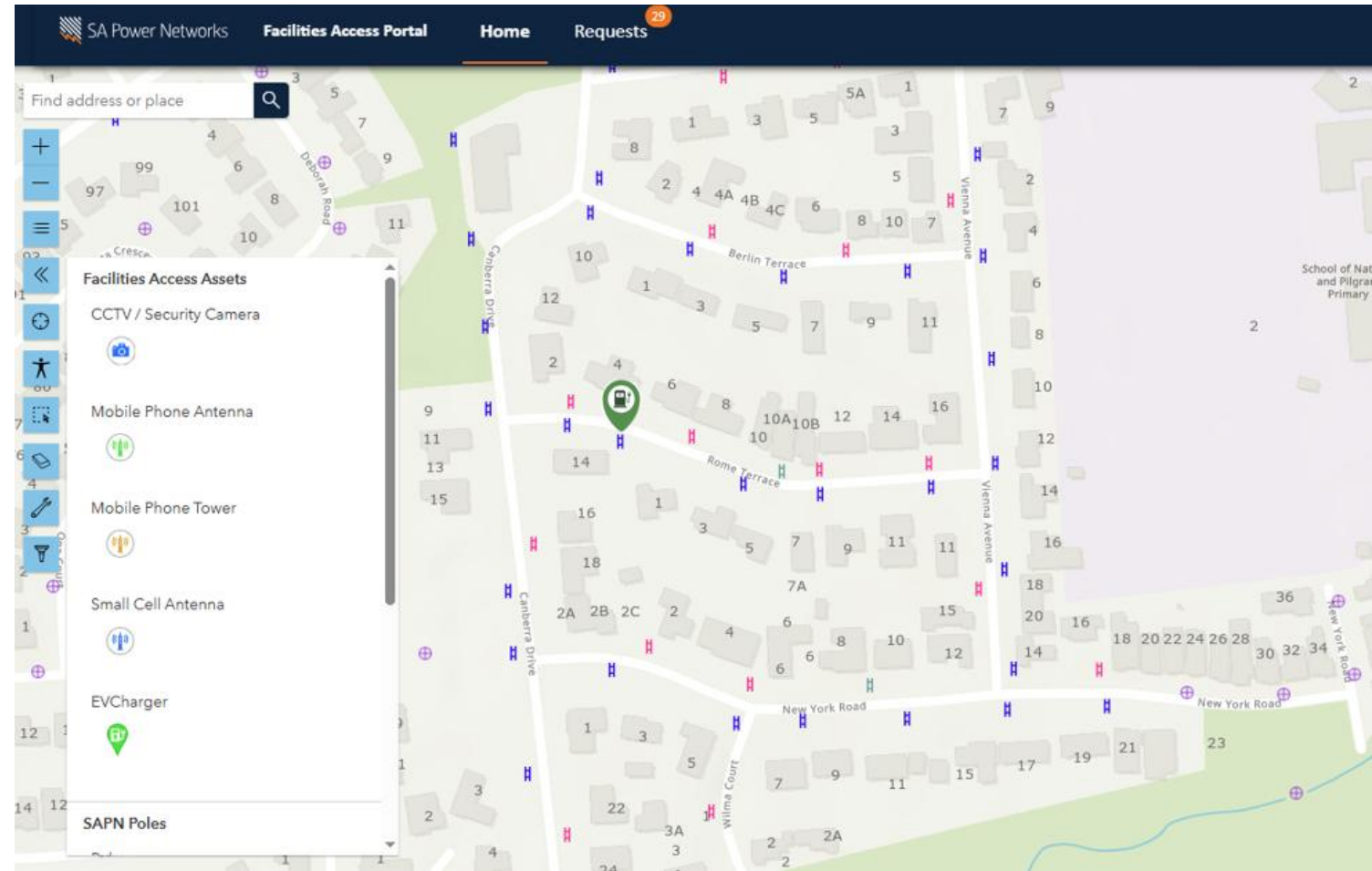


Facilities Access Portal

A new portal has been developed to provide key current Facilities Access customers with a GIS based tool for identifying available new potential equipment sites, and for automated communication through online forms and chat functionality.

For councils this tool could be utilised for:

- Identification of pole locations for future EVC opportunities
- Identification of potential CCTV security camera locations
- Expressions of Interest for ad-hoc equipment installations (banners, speakers, decorations etc...)



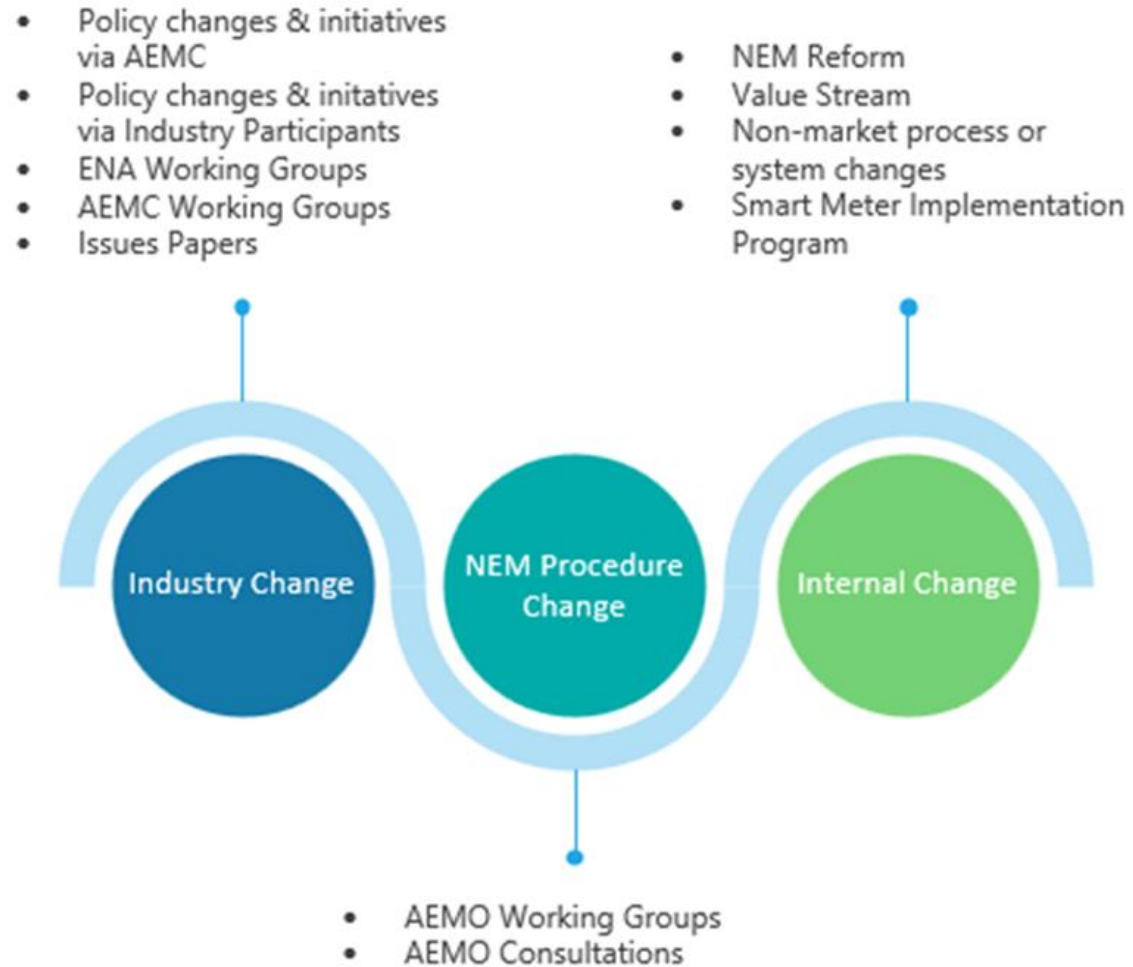
To register your interest in a demonstration and / or gaining access to the portal please contact our team at facilitiesaccess@sapowernetworks.com.au

Metering – Type 7 and Type 9

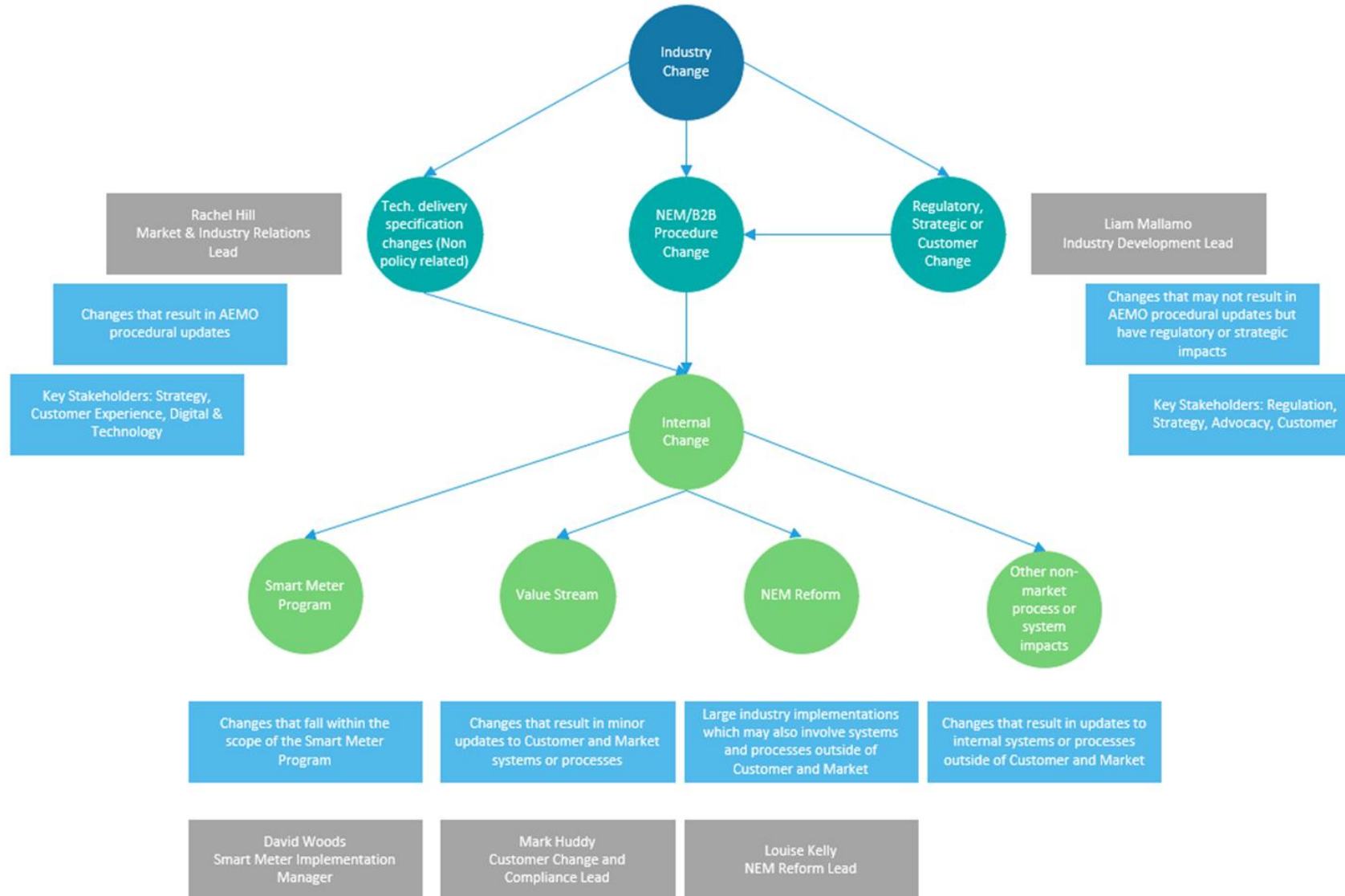
Louise Kelly



Industry and Market change process



Industry and Market change process



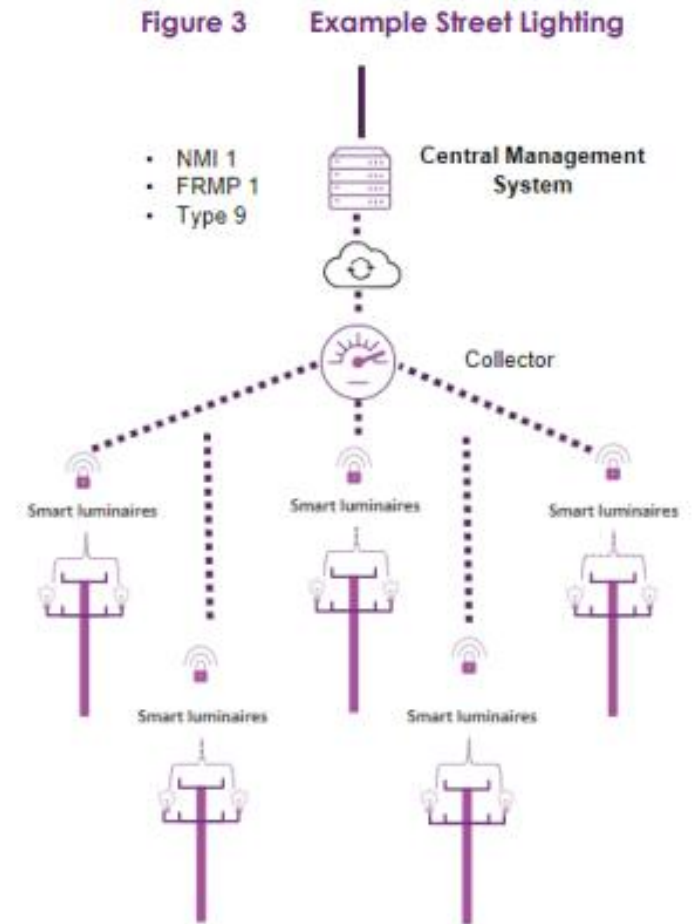
Flexible Trading Arrangements

- On 15 Aug 2024, the Australian Energy Market Commission (AEMC) published the Rule and final determination regarding the "Unlocking CER benefits through flexible trading" project.
- The Rule introduces changes to enable:
 - Flexible trading with multiple energy service providers at large customer premises.
 - Opportunities to optimise CER flexibility for small customers.
 - Measuring energy flows from street furniture connections (e.g. streetlights, EV chargers)



Measuring energy flows from street furniture connections

- Street furniture connection arrangements can include the aggregation of multiple metering points (i.e., multiple streetlights) under one NMI using a central management system (CMS)
- Type 9 CMS metering installation
- Commences 31 May 2026
- What is a CMS?
 - a device or system that collects electronic signals from measurement elements (nodes) and packages it into trading intervals
 - Must have National Measurement Institute Pattern Approval
 - Must have AEMO approval



Type 7 vs Type 9

- Type 7
 - No change to processes
 - Unmetered = Calculated metering data
 - Can still have smart lighting
- Type 9
 - Process determination underway
 - Metered = Actual aggregated metering data
 - Must have smart lighting/CMS



Open Discussion

Questions from the floor?



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