

Connections Advisory Group

Meeting 3

29 July 2025



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 Elders past and present and acknowledge that these are living cultures.

Empowering South Australia, 2023
by Presten Warren (b. 2000)



Time	Item	Lead	IAP2 Level of Engagement
9:30 – 9:40am	1. Welcome/Chair Update • Acknowledgement of Country • CAF Update • Outstanding action items	Troy Smith	Involve
9:40 – 10:10am	2. Customer Solutions Update • Flexible Connections soft launch • Performance update • Portal update • Click Replacement update	Brendon Hampton /Customer Solutions Management Team	Involve
10:10 – 10:30am	3. KRAs and KPI Workshop – playback	Brendon Hampton	Consult
10:30-10:45am	MORNING TEA		
10:45-11:05am	4. Innovation Pathway/IAG Update	Sam Craft/Mark Yates	Consult
11:05 – 11:15am	5. Customer Outcomes Update	Erin Hampton	Collaborate
11:15-11:35am	6. SEG/MEG proposed changes roadmap	Spiro Bratis/ Andrew Lim	Inform
11:35-11:45am	7. Industry Roadshow and Standards Update	James Case	Consult
11:45-12:00pm	8. Other business • What would CAG like to discuss or hear more about at the next meeting? • Around the room	All	Involve
12pm	Close out	Troy Smith	

Welcome/Chair Update

- Outstanding Action Items
- CAF Update

Troy Smith

9:30 – 9:40am (10 minutes)



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Outstanding Action Item	Responsible Party	Status
Mark Yates to provide an update on the Innovation Advisory Group	Mark Yates	Agenda Item 4.
Mark Yates to provide an update at July meeting on the Innovation Advisory Group	Mark Yates	Agenda Item. Sam Craft invited to discuss SAPN's Innovation Pathway and the IAG
Update to be provided at the July meeting regarding SEG and MEG changes with info about job/project streamlining/harmonisation	Spiro Bratis/Andrew Lim	Agenda Item 6.
Draft outcome statements will be provided in the slide deck and a workgroup be created to develop the KRAs and KPIs further.	Brendon Hampton/Erin Hampton	Workshop complete (Monday 21 July) – agenda item 3. follow up workshop in October.
Regular catch ups with meter providers be scheduled to improve service provision and an initial conversation with the meter provider reps, Jonathan and Trish to be scheduled to further develop the idea.	Jac Tume	Completed – first session held on 25/7
Jac reach out to Andrew to discuss the Planning SA portal further.	Jac Tume	Completed – Jac to provide further info
Follow up with Brett and Ian for formal communication to industry that the bus bar should be dropped in the case of inadvertent energisation of a site.	Erin Hampton	Complete - comms to be sent to all users and a Reg Roundup article to be published in next edition
Meeting proposed between Troy, Larry, Brendon, Steve and Ian to discuss the current eCoC process further.	Brendon Hampton/Troy Smith	Scheduled Monday 4 August

Customer Solutions Update

- Flexible Connections soft launch
- Performance Update

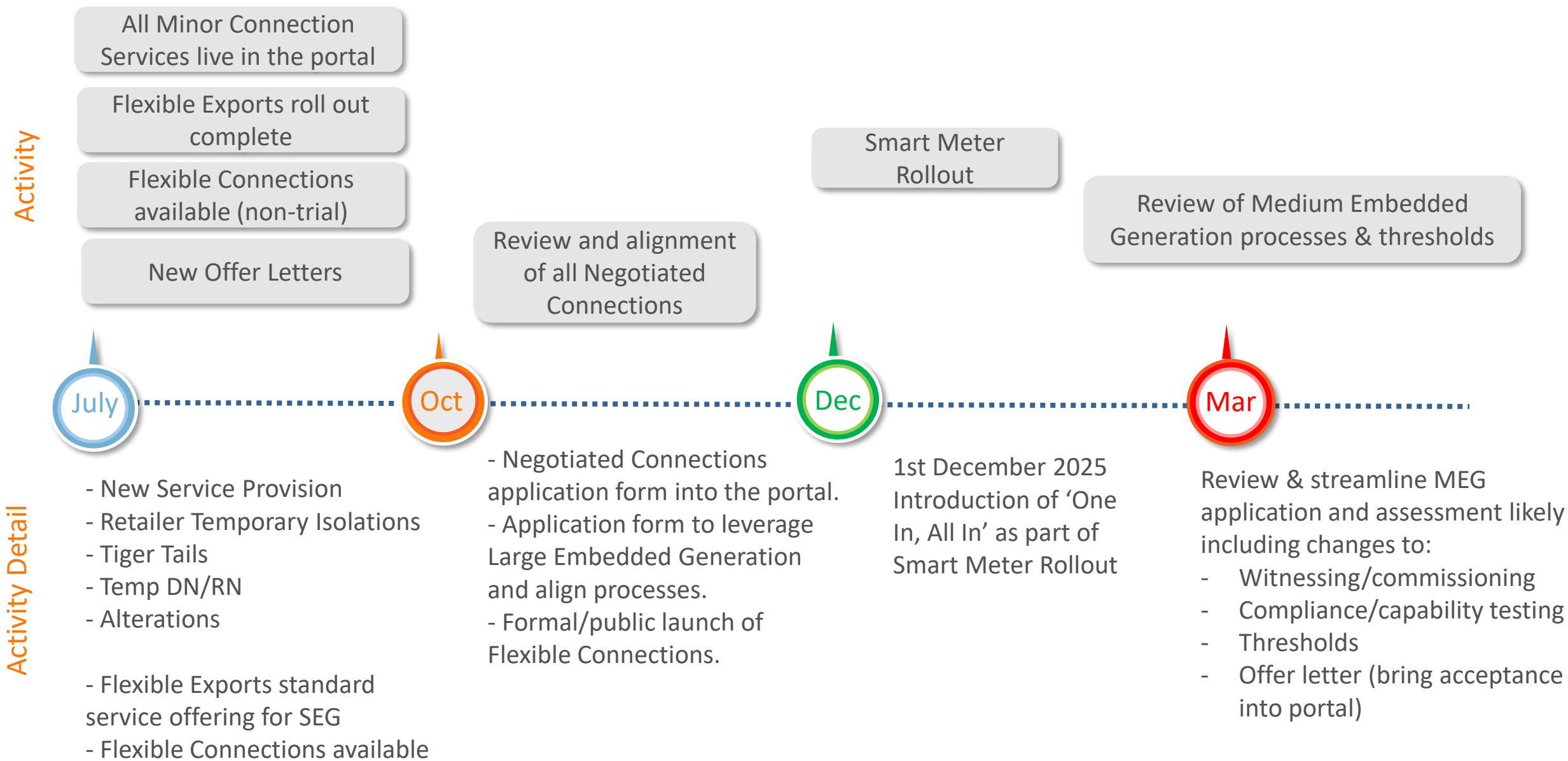
Brendon Hampton

9:40 – 10am (20 minutes)



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Connections Roadmap



Offer letters

- Current letters require a lot of manual work to create – error prone
- Inconsistencies depending on project representative, type of project
- Difficult to find key information
- **New letter set created**, will be used for new projects being created

Project Reference: [Our Reference], [EG Number]

[Publish Date]

[Customer Name]

[Customer Postal Address]

Attention: [Contact Name]



Dear [Contact Name],

Negotiated Connection Offer

Thank you for contacting SA Power Networks with your Connection application. We look forward to working with you on this project.

The purpose of this offer letter

You have requested a Connection Offer to **[establish a Connection /modify the existing Connection]** at **[Location]** (also known as the Supply Address). This letter and its accompanying documents represent our Offer to facilitate your requested connection, including the associated scope of works, costs, timeframes, and conditions.

As part of this Offer, you have requested SA Power Networks to deliver both the **Contestable and Non-Contestable Works**.

Acceptance of this offer letter

This Negotiated Connection Offer is made in accordance with the requirements of Chapter 5A of the National Electricity Rules. By signing and returning the Acceptance Form you are confirming that you have read the Contract (i.e. this letter, its attachments and all relevant parts of the Construction Terms and Ongoing Supply Connection Contract) and agree to all contract terms and connection charges payable.

Having accepted the Offer, a Contract then exists between the Customer and SA Power Networks.

We're here to help

If you have any questions please do not hesitate to contact **[Project Officer]**, **[Full Title]** at our **[Office]** office, on **[PO Phone]** or **[PO Email]**.

Signed for and on behalf of SA Power Networks by:

[Authorised Signatory]

[Full Title]

SA Power Networks ABN 13 532 330 749 a partnership of Spark Infrastructure SA
 Pty Ltd (Pty Ltd ABN 14 591 142 880), Spark Infrastructure SA Pty Ltd (Pty Ltd ABN 19 093
 143 738), Spark Infrastructure SA Pty Ltd (Pty Ltd ABN 19 791 142 880), each incorporated
 in Australia, C3I Utilities Development Limited ABN 63 092 732 880, Pty Limited
 Development Limited ABN 63 092 732 880, each incorporated in The Bahamas.

www.sapowernetworks.com.au

Letter L-XXX, Version DOM/YYYY | Project Reference: [Our Reference], [Publish Date]

Page 1 of 8

Project Reference	[Our Reference], [EG Number]
Offer Date	[Publish Date]
Customer Name	[Customer Name]
Supply Address	[Location]
Project Outcomes	• [establish a Connection /modify the existing Connection] • [Amps] Ampere, three phase connection • [Gen kVA] kVA generation • [Export Limit kW] kW generation export
Net Customer Payment	[TCP] (GST Inclusive) <i>These Charges may be varied in certain circumstances, as set out in the Construction Terms. Additional costs may also be payable in certain circumstances.</i>
Project Timeframes	If our Offer is accepted and payment is received by [Contract Commitment Date] (Contract Commitment Date), SA Power Networks will endeavour to have the Works completed by the end of [Timeframe] subject to: • Construction Terms. • Preconditions. • Completion of the preliminary works. • Timely responses to requests for information. • Customer to meet the defined project milestones. If the Offer acceptance and payment are received after [Contract Commitment Date] (Contract Commitment Date), a new Project Schedule will have to be agreed on by both parties.
Offer Letter Validity Period	[Validity Period] business days from the date of this letter. After this date the Offer automatically lapses.

2. Connection Details

Supply Address	[Supply Address]		
Connection Point (CP)	[Connection Point] [Connection Description]		
Point of Common Coupling	[PCC]		
Connection Voltage	[PCC Volt] V		
Authorised Service Capacity (Load)	Total	[Total kVA] kVA	[Total Amps] A at [PCC Volt] V
	Firm	[Firm kVA] kVA	
	Flexible Load	Additional, up to [Flex kVA] kVA	
Power factor when importing from the Network	[PF Import]		
Generating System Capacity	Total	[Gen kVA] kVA [Gen Type]	[Gen Amps] A at [PCC Volt] V
	Equipment List	• XX x XXkVA Solar Photovoltaic (PV) inverters ([Model Type])	
Generating System Export Capacity	Flexible Export	Up to [Flex Gen kW] kW	
Power factor when exporting to the Network	[PF Export]		
Current Limiting Device Setting	[Current Limiting] A		
Design Fault Level	[Fault kA] kA		

South Australia's renewable milestones

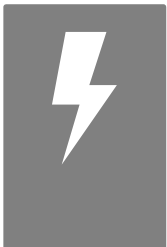
72% of net annual demand met by Variable Renewables



2.8GW of Rooftop PV



1.5GW Average Demand



>44% of homes have solar

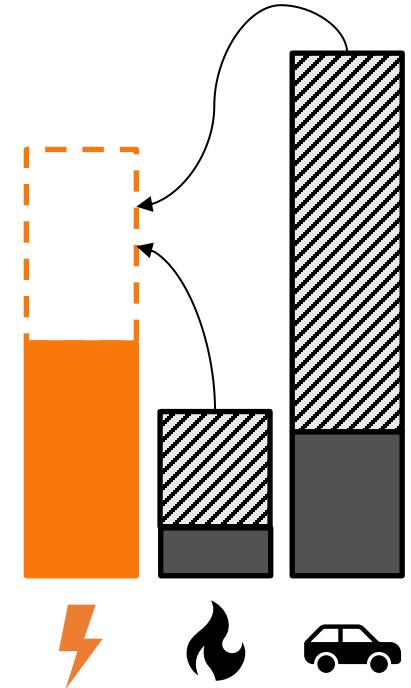


-205MW Negative Demand and 113% Rooftop Solar records



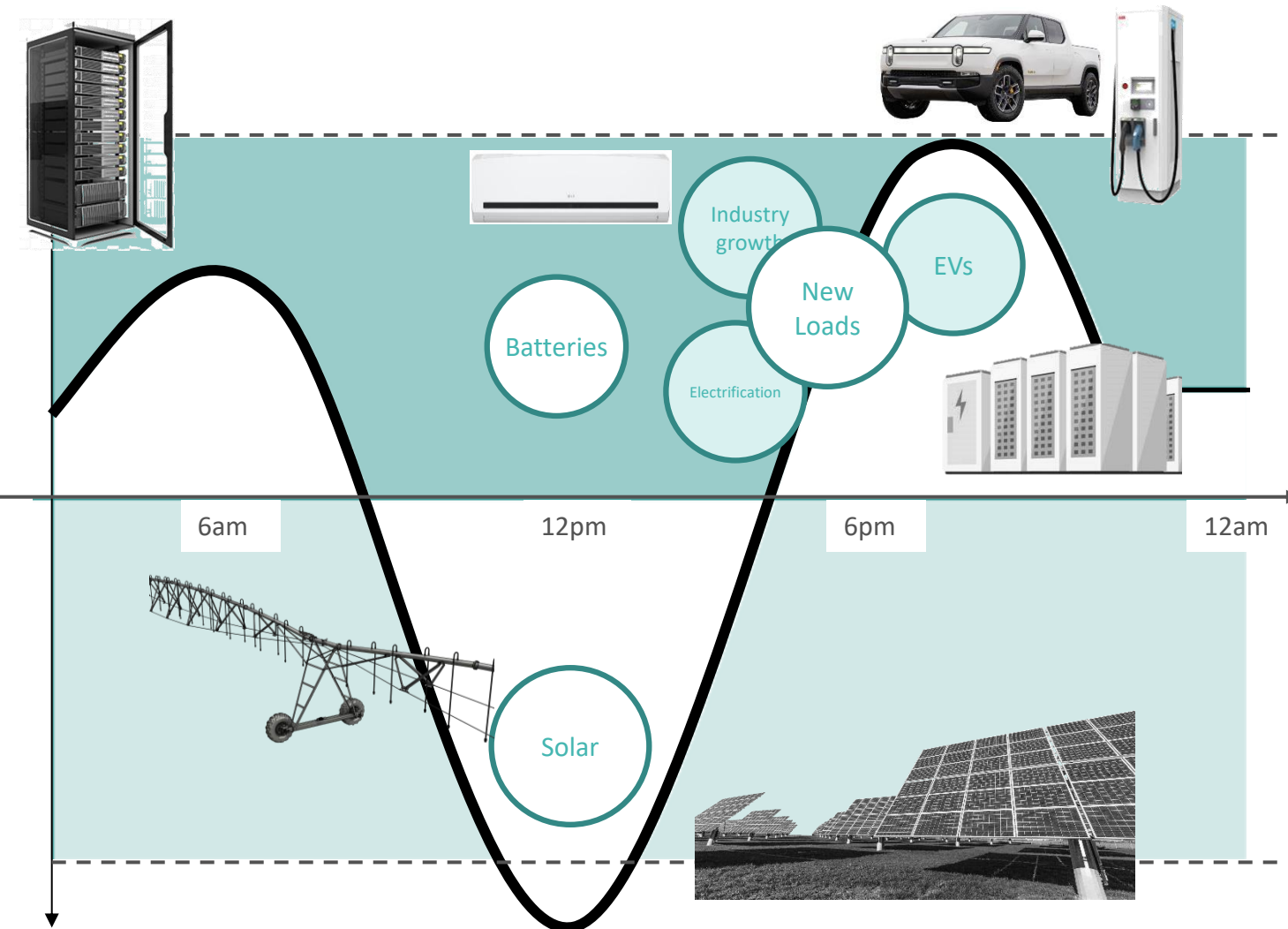
...and by 2050

Electrification could double network throughput



Making SAPN the largest provider of end-use energy in SA

Network Utilisation Opportunity



Traditionally, networks have been built to cater for peak loads.

If we **shift load** out of the peak, and **fill the underutilised network**, we can continue to add more connections without the need for extensive upgrades and provide opportunity to reduce costs to all users.

We can do this by bringing together network management, tariff signals and flexible device usage.

*Network reliability has generally been improving through time, but network asset utilisation has decreased... it is vital that **before we build more network, we use more network.***

AER Chair 31 July 2024.

Addressing some negotiated connection pain points

Customer pain points:



Network augmentation
timeframes



Upfront connection
costs



Ongoing network
tariffs



Availability of network
capacity

Our new flexible offers are designed to:

Assist connections
regardless of augmentation
timeframe

Minimise augmentation
fees for flex capacity

Offer discounts on flexible
demand & narrower peaks

Unlock more existing capacity
for customers and maximise
utilisation of the network

Flexible connection offer

Up-front:

- No Augmentation fee (ICSN) for flexible component
- No need to wait for firm augmentation
- Must be at least 500kVA flexible and 20% of load
- Suitable control technology must be installed at the customer site

Ongoing:

- Flexible tariff benefits:
 - Reduced peak demand window – temp dependent
 - Discounted Flexible demand tariff
- Adherence to import/export limits is required

Flexible Connections - SEG

From 17 July 2025, the Flexible Exports option will be released to the rest of the council areas in South Australia.

Existing solar customers will remain on their current export arrangements until such time as they upgrade or replace their system. At that point, they would need to choose between a [flexible export](#) plan or a lower fixed export limit.

What does this mean for Single-wire earth-return (SWER) line customers who generally live in regional areas?

In an additional change customers who are on SWER parts of our network will be able to install up to 10kVA of capacity (increased from 5kVA) through their Flexible Exports connection.

Customers on SWER lines have historically only been able to install up to 5kVA of solar capacity and 5kVA of battery capacity. In a change to our generation connection standard [TS129](#), SWER customers will be offered a limit of 10kVA installed solar and 10kVA battery capacity, allowing you to install more solar and battery. Your solar energy exports may be limited more than other customers however, you can still make the most of your larger installation by self-consuming the energy it generates.

Flexible Connections - SEG

New TS129 published

The total system capacity allowable is 30kVA.

Configuration	Limits (total) Per phase		SWER, single-phase transformer that is split into two or in highly constrained network areas
PV only; OR New PV + new battery ² ; OR Existing PV + new additional PV; OR Existing PV + new additional PV + new battery ²	Inverter capacity	≤10kVA PV + ≤10kVA battery up to a total of 30kVA for 3 phase connections	≤10kVA PV + ≤10kVA battery
	Site export	1.5-10kW	0-10kW ¹
Existing PV ¹ + new battery only	Inverter capacity	≤10kVA PV + ≤10kVA battery up to a total of 30kVA for 3 phase connections	≤5kVA PV + ≤10kVA battery
	Site export	1.5-10kW	0-10kW

Table 1: IES Configurations Inverter Capacity & Export Limits

Meter Isolators

- Coupled with the Flexible SWER rollout plus the concerns identified by the OTR, the SEG application and installation has been updated to remind electricians and installers of the need to install Meter Isolators correctly
- Meter Isolator questions now appear in both the SEG Application and Installations

Applications

Meter Isolator

Overview

Safety Information

Is there a Meter Isolator installed on site?

Yes

No

Not required

Not required as specified under [SIR 5.15.2](#) Repairs to existing installations (TIR).

Installations

Meter Isolator

Is there a Meter Isolator installed on site?

Yes

Installed but non-connected Meter Isolators must be tagged 'Out of Service' as per the [SIR 7.4.3.4](#).

Connections CSAT June

Connections Customer

Customer satisfaction (CSAT)

Overall, how satisfied are you with the way SA Power Networks dealt with the connection service?

Customer satisfaction (CSAT) 84% target 46



CSAT distribution 46



Extremely dissatisfied Somewhat dissatisfied Neither satisfied nor dissatisfied
Somewhat satisfied Extremely satisfied

Connections Electrician

Customer satisfaction (CSAT)

Overall, how satisfied are you with the way SA Power Networks dealt with the connection service?

Customer satisfaction (CSAT) 87% target 23



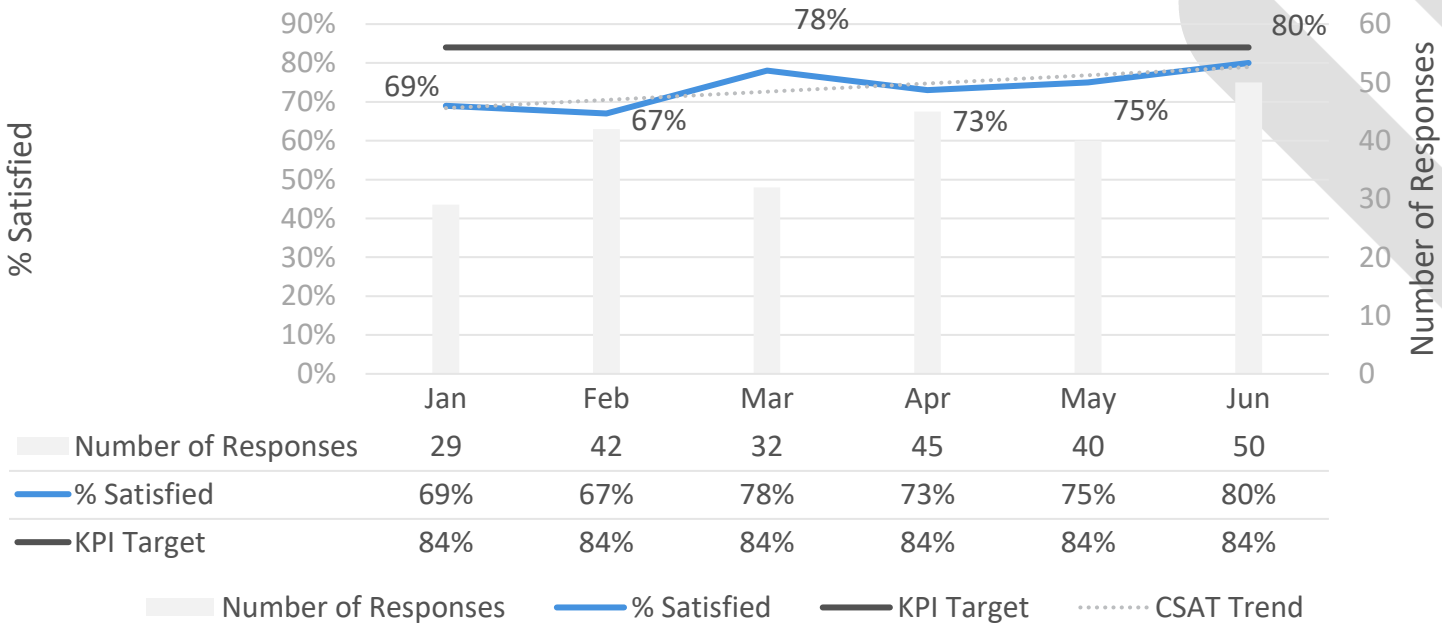
CSAT distribution 23



Extremely dissatisfied Somewhat dissatisfied Somewhat satisfied Extremely satisfied

Connections customer

Includes only New Service Provision, Alterations and Abolishment services



Jan -
June
74%



Target
84%

Key Drivers: Focus for improvement

Timeframe of connection delivery (66% satisfied, primary fix)

Quality of information in communications (70% satisfied, secondary fix)

Number of communications (69% satisfied, secondary fix)

Ability to access job information (59% satisfied, secondary fix)

Key Drivers: Strengths to maintain

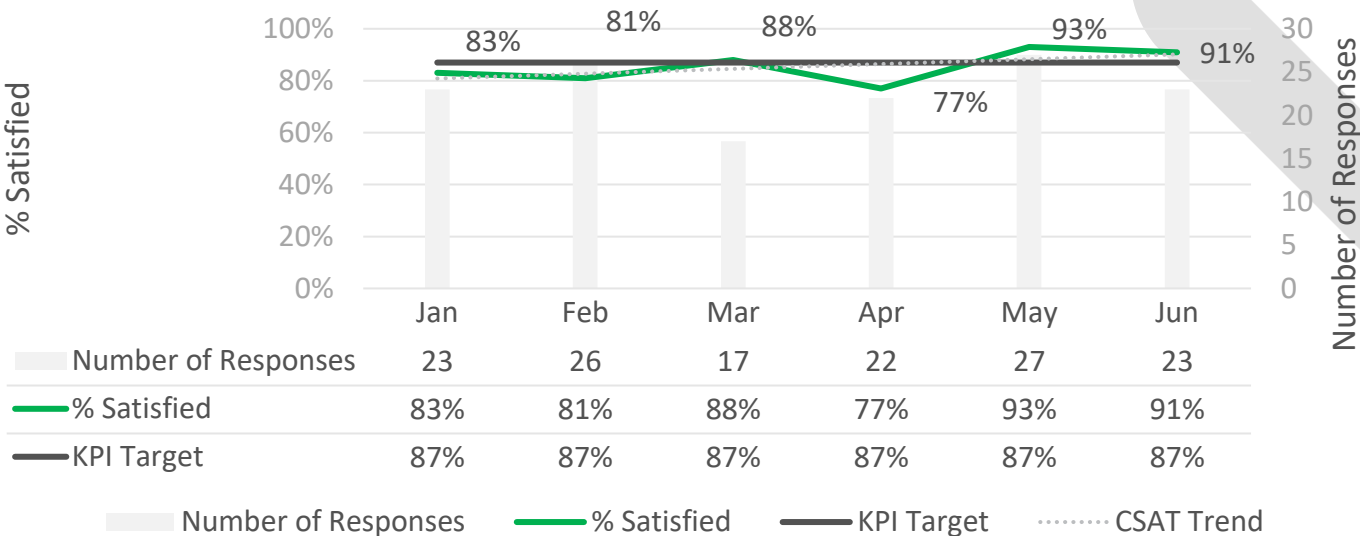
Safety of the site post-works (87% satisfied, area to promote)

Tidiness of the site upon completion (84% satisfied, area to promote)

Professionalism of the field technician (88% satisfied, area to celebrate)

Connections electrician

Includes only New Service Provision, Alterations and Abolishment services



Jan -
June
86%



Target
87%

Key Drivers: Focus for improvement

Number of communications during the connection service	76% satisfied primary fix
Timeframe of connection delivery	65% satisfied secondary fix
Ability to access job information	76% satisfied secondary fix
Number of communications in the lead up to the service	79% satisfied secondary fix

Key Drivers: Strengths to maintain

Professionalism of the field technician	93% satisfied area to promote
Tidiness of the site upon completion	96% satisfied area to promote
Safety of the site post-works	96% satisfied area to promote
Quality of information in communications	84% satisfied area to celebrate

Connections: Survey distribution by month

Month	No. of complete jobs eligible for survey*	No. of surveys sent (electrician & customer)	Email bounced	No. of surveys started	No. of surveys finished	Completion Rate	Response Rate (target 5%)
January	1258	528	52	43	33	76.7%	7%
February	1587	927	43	81	68	84%	8%
March	1591	862	44	71	62	87.3%	8%
April	1637	882	43	76	60	78.9%	7%
May	1728	908	52	60	51	85%	8%
June	TBC	984	59	82	69	84%	7%

No. of completed jobs eligible for survey and No. of surveys sent

Number of ‘Surveys sent’ is based on the number of jobs completed (alterations, abolishment and connections) in the previous week (Sunday to Saturday).
Nb. electricians receive surveys for new connections and alterations only.

The ***sampling methodology** for sending surveys considers the following:

- If contact details appear more than once any duplicate survey invites are blocked per survey cycle.
- The ‘Anti-spam rule’ means that surveys sent are limited, to avoid sending customers multiple invites and prevent survey fatigue
- The frequency rules are:
 - Electricians: 60-day gap
 - Customers: 90-day gap

Nb. Given the limited pool size, it's important to maintain consistent feedback volumes to ensure meaningful insights can be drawn across the full reporting year.

Completion Rate

Completion rate refers to the percentage of customers who finished the survey out of those who started it.

Response Rate

Response rate is the percentage of customers who took the survey compared to the number of customers invited (minus any bounced invites).

Portal Update

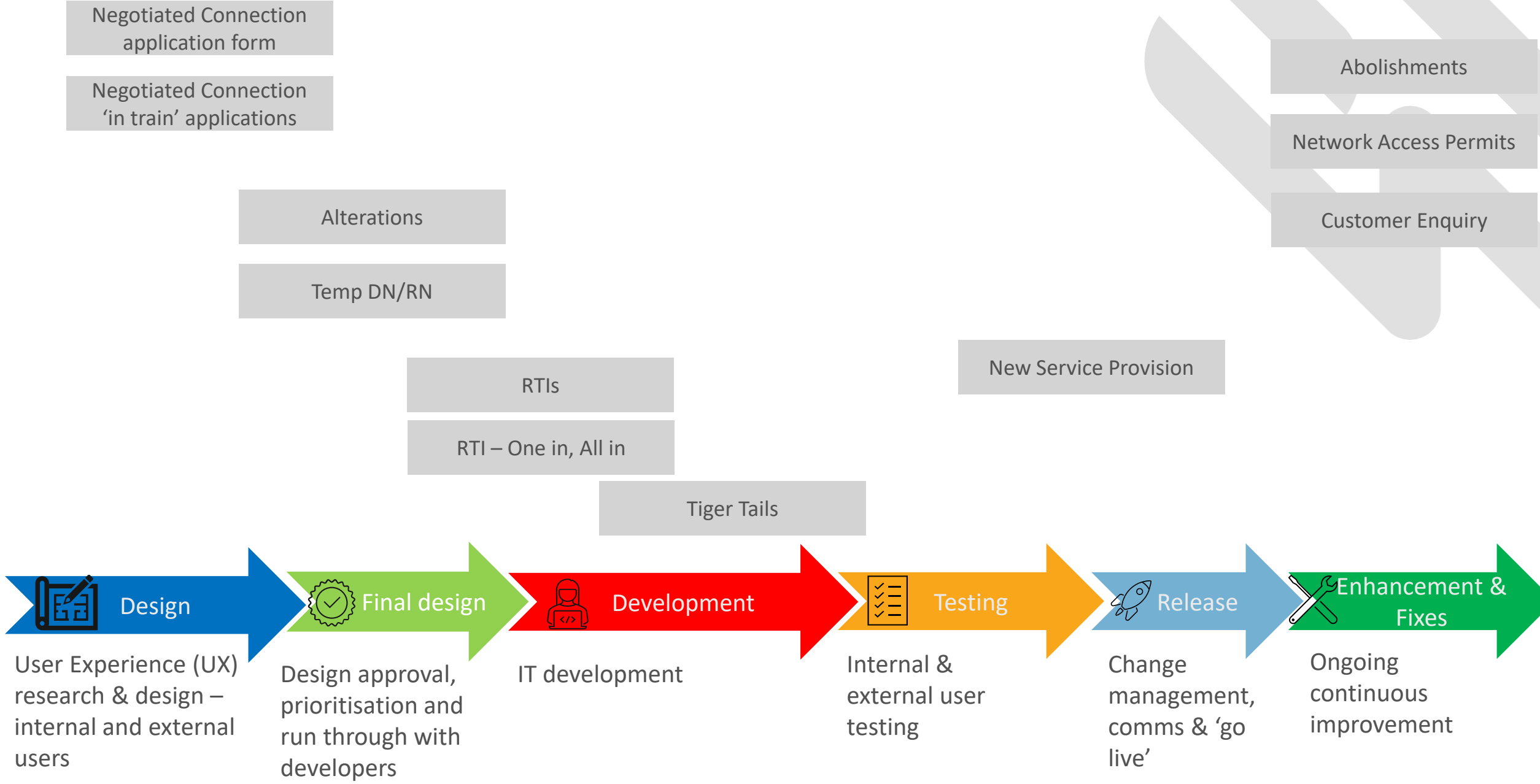
Jac Tume

10-10:05am (5 minutes)



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Portal Services Progress Update



Minor Connections – Retailer & Electrician engagement update

- **Recent activity:**

- Customer Enquiry service now live (previously Request a Quote form)
- Simple feedback mechanism provides a quick, low-effort way for users to share their thoughts
- Continued direct engagement with electricians and Retailers to shape Portal development
- Hosted usability sessions with a number of electricians focused on New Service Provision
- Preparing for dashboard feedback sessions with Retailers

- **Positive feedback received:**

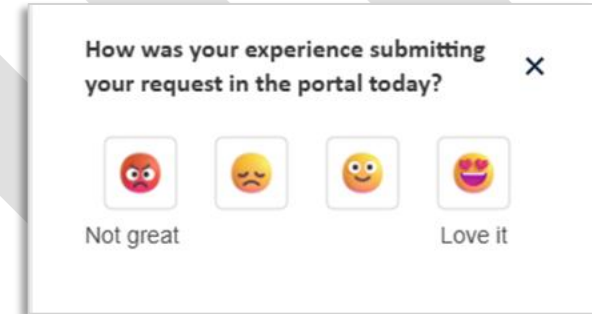
- Portal is clearer and faster than REX
- Strong support for real-time updates and ease of use

- **Features requested:**

- Keen for saved user details (auto-fill) to reduce admin
- Clearer handoffs – who's responsible at each step within SAPN

- **What's next:**

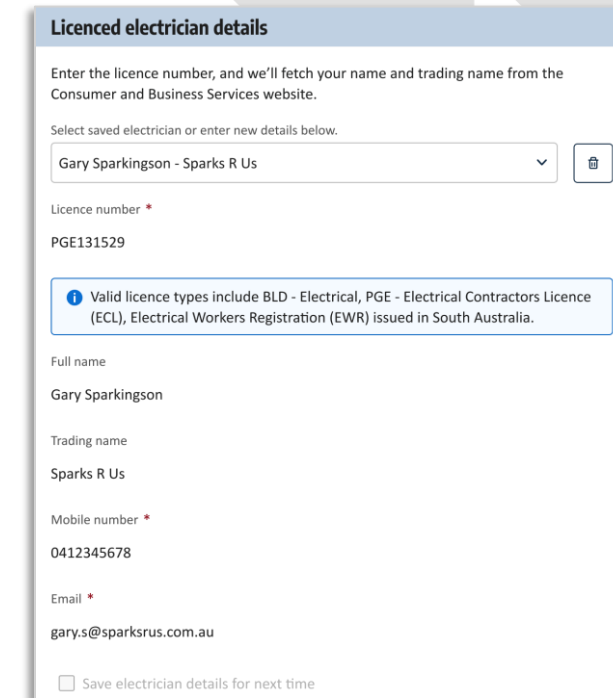
- Developing early dashboards for visibility of all jobs in customisable views
- Prioritising most requested fixes and improvements
- Preparing for a staged release of New Service Provision, starting with testers and moving to full transition from REX



How was your experience submitting your request in the portal today?

Not great Love it

This is a feedback modal with a close button (X) in the top right. It contains four emoji-based rating options: a sad face (Not great), a frowning face, a neutral face, and a smiling face (Love it).



Licenced electrician details

Enter the licence number, and we'll fetch your name and trading name from the Consumer and Business Services website.

Select saved electrician or enter new details below.

Gary Sparkingson - Sparks R Us

Licence number *
PGE131529

Valid licence types include BLD - Electrical, PGE - Electrical Contractors Licence (ECL), Electrical Workers Registration (EWR) issued in South Australia.

Full name
Gary Sparkingson

Trading name
Sparks R Us

Mobile number *
0412345678

Email *
gary.s@sparksrus.com.au

☐ Save electrician details for next time

This is a form for entering electrician details. It includes a dropdown for selecting a saved electrician, a text input for the licence number, and a text input for the full name. It also has a section for trading name, mobile number, and email. A checkbox at the bottom allows saving details for next time.

Negotiated Connections - Update

- Design almost complete for the 'in progress' application
- Application form design still being refined – will be consolidating LEG into the form
- Always looking for volunteers to undertake User Research and design sessions

Now

- Bringing 'in progress' jobs into portal
- Finalising designs for application form

Next

- Application form (consolidating LEG and Negotiated)

Later

- Online offer letter
- Milestones
- Request tracker
- Payment gateway

The screenshot displays the 'Requests' section of the SA Power Networks portal. The user is logged in as 'Julia R'. The page title is 'Negotiated connection overview' for Request ID 12345678910, which is marked as 'APPLICATION SUBMITTED'. A message box states: 'You're viewing a summary of your request as we move to a refreshed Portal experience. Full request details are available for all new applications submitted in the Portal.'

Request summary

Request ID	Date created
12345678910	10 May 2024
Customer address	
25 Smith Street, Keswick, SA, 5035	
National Meter Identifier (NMI)	Service Type
12345678910	NEGOTIATED CONNECTION

Additional details

Postal address	Telephone
25 Smith Street, Keswick, SA, 5035	0401 111 222

Need help?

Speak to one of the friendly team at SA Power Networks:

Name: (EmployeeResponsible)
Phone: 13 12 61
Email: firstname.lastname@sapowernetworks.com.au

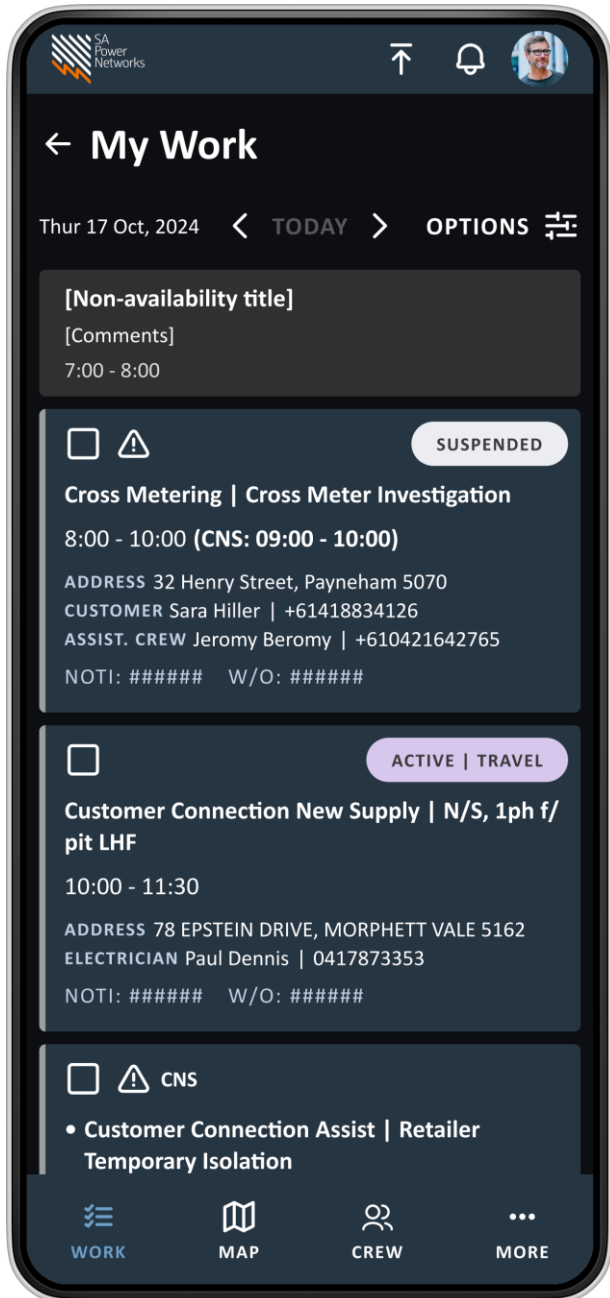
Click Replacement

Jaclyn Tume

10:05-10:10am (5 minutes)



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What is CLICK FSE?

Click FSE is a cloud-based software solution for managing and optimisation field-based operations.

There are two key elements of Click used by SA Power Networks:

1. **Click Schedule** – Where schedulers control and maintain visibility of assigned field work.
2. **Click Mobile** – How field workers receive the information they need to carry out their tasks.

Click FSE has been declared End Of Life on 31st December and work is in progress to replace both Schedule and Mobility.

Salesforce Field Service has been selected as the replacement product for Click Schedule, and work has already commenced on implementing this.

A bespoke user interface will be built by SA Power Networks to replace Click Mobility, which will help overcome the many digital challenges currently faced by our field users. Build is in progress.

Why does it relate to Connection messaging?

- At a previous Connections Advisory Group there was a request to send messages to Electricians and potentially Meter Providers when the crew was on their way
- This is possible and there are 2 options:
 - **Least preferred** – implement by the end of the year, however with the current system it is likely going to create a **negative** experience.
 - **Most preferred** – deliver in Q1 2026, at that time Electrical services will be in the new system, which will introduce more robust Crew status prompts



KRAs and KPIs Workshop Playback

Brendon Hampton

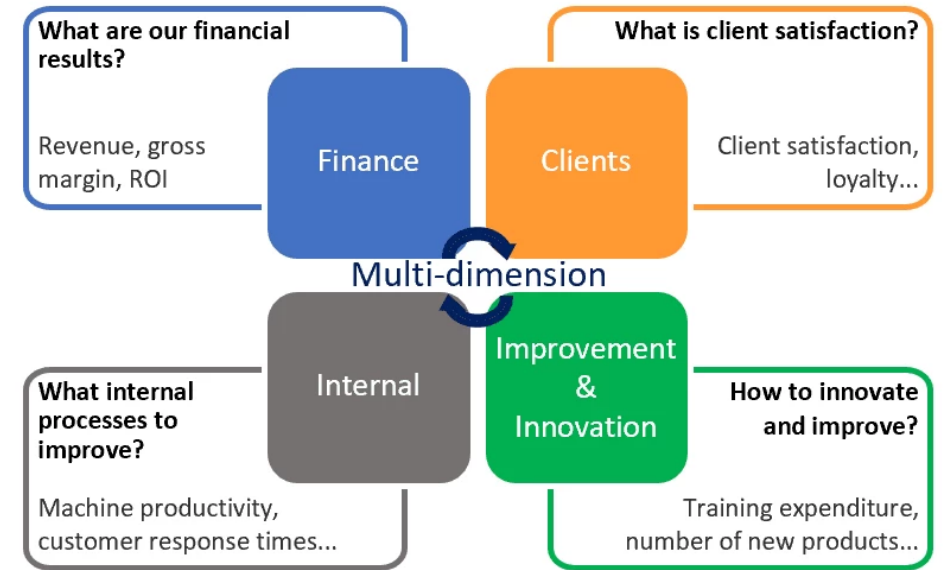
10:10 – 10:30am (20 minutes)



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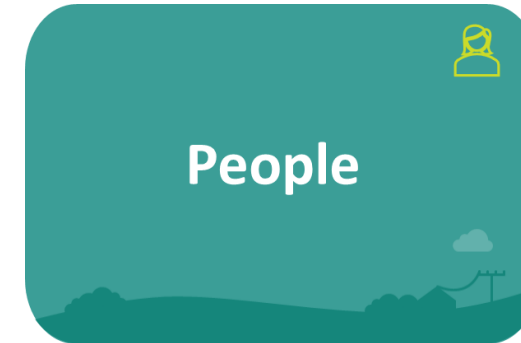
Project Deliverables

- **Balanced scorecard**
- **KPI implementation ‘plan’**
- **Regular Reporting** in place
- **Governance**
 - Over the results and mitigating actions
 - Over the update of existing measures or new measures



Customer Solutions Balanced Scorecard

Key Result Areas



Enabled by:



Customer Solutions Balanced Scorecard

Outcome statements

Customer Experience



'Providing an easy, streamlined experience, aligned with customer expectations'



People



'Our people are highly capable, empowered and enabled to deliver great outcomes'



Project & Services Delivery



'Excellence in project and services delivery'



Processes and Systems



'Processes and systems that make it easy for our customers and our people to consistently achieve great outcomes'



**Connecting South
Australians to a better
energy future, today.**



Commercial



'Optimise our cost to deliver, and maximise creation of customer, community and business value'



Customer Solutions Balanced Scorecard

Outcome statements - enabling behaviours

Customer Experience

‘Providing an easy, streamlined experience, aligned with customer expectations’

- Proactive and timely communications and engagement
- Aligning on expectations and delivering on our promises
- Consistent, reliable and cost-effective service delivery
- Relationships built on trust, transparency and being easy to deal with
- Up to date and easily accessible information

People

‘Our people are highly capable, empowered and enabled to deliver great outcomes’

- Prioritising the safety and wellbeing of our people
- Creating a positive and rewarding work environment
- Celebrating achievements and recognising performance
- Ensuring the right skills and resources are in place
- Investing in the growth and development of the team
- Regularly seeking and responding to feedback

Project & Services Delivery

‘Excellence in project and services delivery’

- Efficient, on time and on budget delivery of our projects and services
- Consistently applying best practise approaches
- Flexibility to accommodate changes and diverse needs
- Clear accountabilities across end-end processes
- Status visibility, action tracking and regular reporting
- Collaborative relationships with our delivery partners

Processes and Systems

‘Processes and systems that make it easy for our customers and our people to consistently achieve great outcomes’

- Streamlining and standardising end-end processes
- ‘Nailing’ the implementation of the customer portal and accompanying work management system
- Making it easy to provide feedback and improvement ideas
- On-going enhancements of our systems

**Connecting South
Australians to a better
energy future, today.**

Commercial

‘Optimise our cost to deliver, and maximise creation of customer, community and business value’

- Pursuing efficiency opportunities
- Providing innovative energy solutions that meet the evolving needs of our customers
- Balancing customer, risk and commercial outcomes
- Accurate estimating, forecasting and budgeting
- Strong governance over project financial performance

Customer Solutions Balanced Scorecard

Performance measures – examples

Customer Experience



‘Providing an easy, streamlined experience, aligned with customer expectations’

- CSAT
- Timeliness of responses, updates
- Complaints
- Knockbacks - #, cause
- Commitment/SLA/NECF achievement
- Flexible Connections – uptake, performance

People



‘Our people are highly capable, empowered and enabled to deliver great outcomes’

- Culture survey results
- Capability maturity rating
- Workloads
- Training – spend, delivery
- Development plans

Project & Services Delivery



‘Excellence in project and services delivery’

- Services/projects – received, processed, time to delivery, backlog
- Scoping quality
- Process steps – time taken, lead time, backlog
- Rescheduling – number, cause
- Internal service requests – issued, processed, backlog, SLA

Processes and Systems



‘Processes and systems that make it easy for our customers and our people to consistently achieve great outcomes’

- Improvements – submitted, delivered
- Portal utilisation
- Portal uptime

**Connecting South
Australians to a better
energy future, today.**

Commercial



‘Optimise our cost to deliver, and maximise creation of customer, community and business value’

- Financials – spend, contributions, margin
- Unit delivery costs
- Estimate accuracy
- Project budget control
- Variations
- Invoicing – raised, paid, overdue, blocked

CAG sub group discussion – key takeaways

- **Process and System Improvements:**

- There is inconsistency in managing jobs across depots/work areas, with teams relying on spreadsheets and manual tracking.
- The portal development will focus on centralising, standardising and automating workflows, aiming to eliminate inefficiencies and silos, and ensuring our team is focussed on the right things.

- **Communication**

- Proactive communication is critical to reducing inbound enquiries and improving customer satisfaction.
- Trust - This will give customers confidence that we are 'on top of' their request and that expectations are aligned.
- Communication training is being rolled out to improve team skills in this area.

- **KPIs and measurement**

- Tracking and reporting on project progress and bottlenecks will help identify areas for improvement.

Our #1 Priority



Clarity on process – portal and website

Visibility

- Which step we're up to
- How long each step typically takes/our 'SLA'
- How long it is taking – timestamped

Regular updates

- Automated notifications
- 2-way messaging in the portal (refer Origin)
- SLA on engagement frequency depending on project/service classification

Next steps

- Planning for implementation in the portal
- Group will reconvene in October to check in on progress

Morning Tea

10:30-10:45am (15 mins)



Innovation Operating Model and Pathway

Strategy and Implementation Plan

Sam Craft

10:45-11am (15 Minutes)



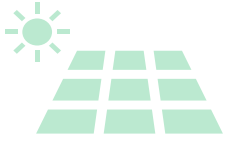
What is innovation ?

- The **intentional** introduction and **application** of **novel** ideas, processes, or technologies that **create value** by significantly **improving** business outcomes, operations, or customer experiences.
- It's accompanied by a clearly defined problem statement
- Strong strategic alignment

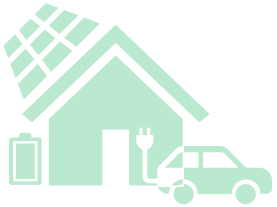
This definition highlights several key aspects:

- **Intentional:** Innovation is deliberate, not accidental. It arises from a purposeful drive to improve.
- **Novelty:** The idea or method must be new in some context - new to the company, industry, or globally.
- **Application:** Innovation isn't just about ideas; it involves putting those ideas into practice.
- **Value Creation:** Innovation must result in measurable benefits -whether through efficiency, effectiveness, competitiveness, or customer satisfaction.
- **Improvement Focus:** The end goal is always to enhance some aspect of the business

Innovation can help solve our biggest strategic challenges



- World's highest solar uptake
- Network and minimum demand challenges



- Electrified homes could double network demand



- Demand flexibility is key to integrating these at lowest cost
- Transition to DSO

**Future Networks
Innovation**



- Cost of living pressures
- Growing energy affordability and equity divide



- Increasing customer service expectations (notification, connections, digitisation, AI etc)



- Declining consumer trust in the energy sector

**Customer
Innovation**



- Oldest asset base in the NEM
- Need to balance safety, reliability, affordability



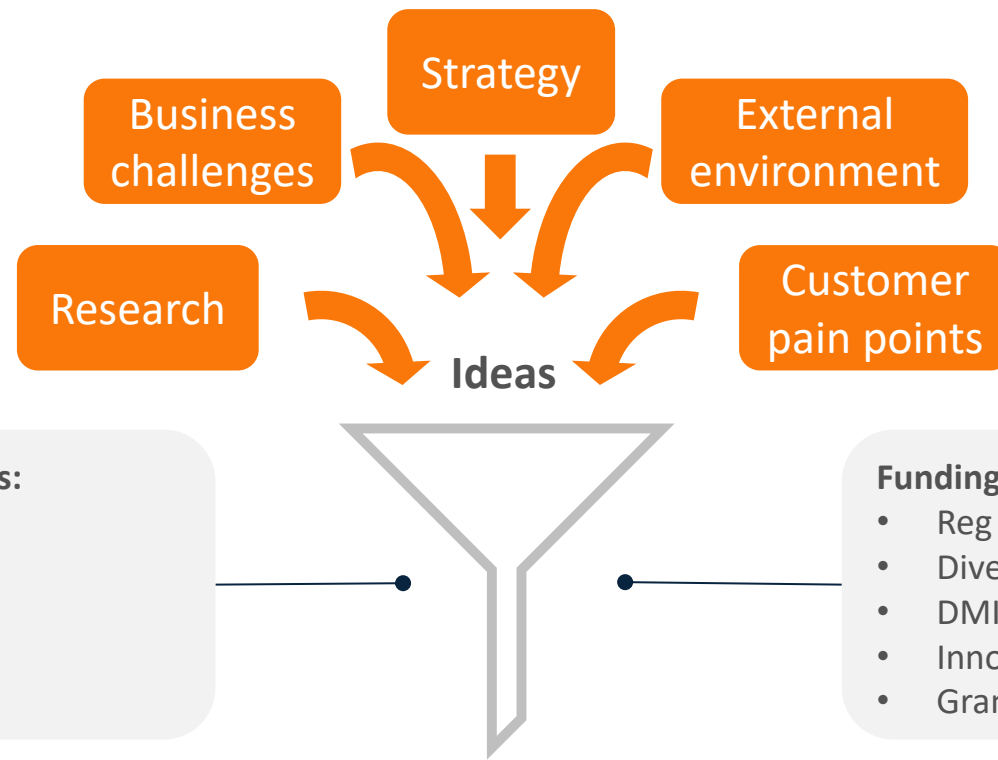
- Changing climate - increasing extreme weather events (e.g. storms, bushfires)



- Increasing pressure to 'do more with less'
- New tech emerging in the industry (e.g. SAPS, drones, digital twins)

**Asset Management
and Operations
Innovation**

Innovation Framework



Innovation portfolios

Customer experience innovation

Customer benefits: Improved customer experience

Example 'problems':

- Customer experience
- Energy affordability/vulnerable customers
- Connections process

AM&O Innovation

Customer benefits: cost reduction through operational efficiencies

Example problems:

- Vegetation management costs
- Ageing assets
- Regional reliability

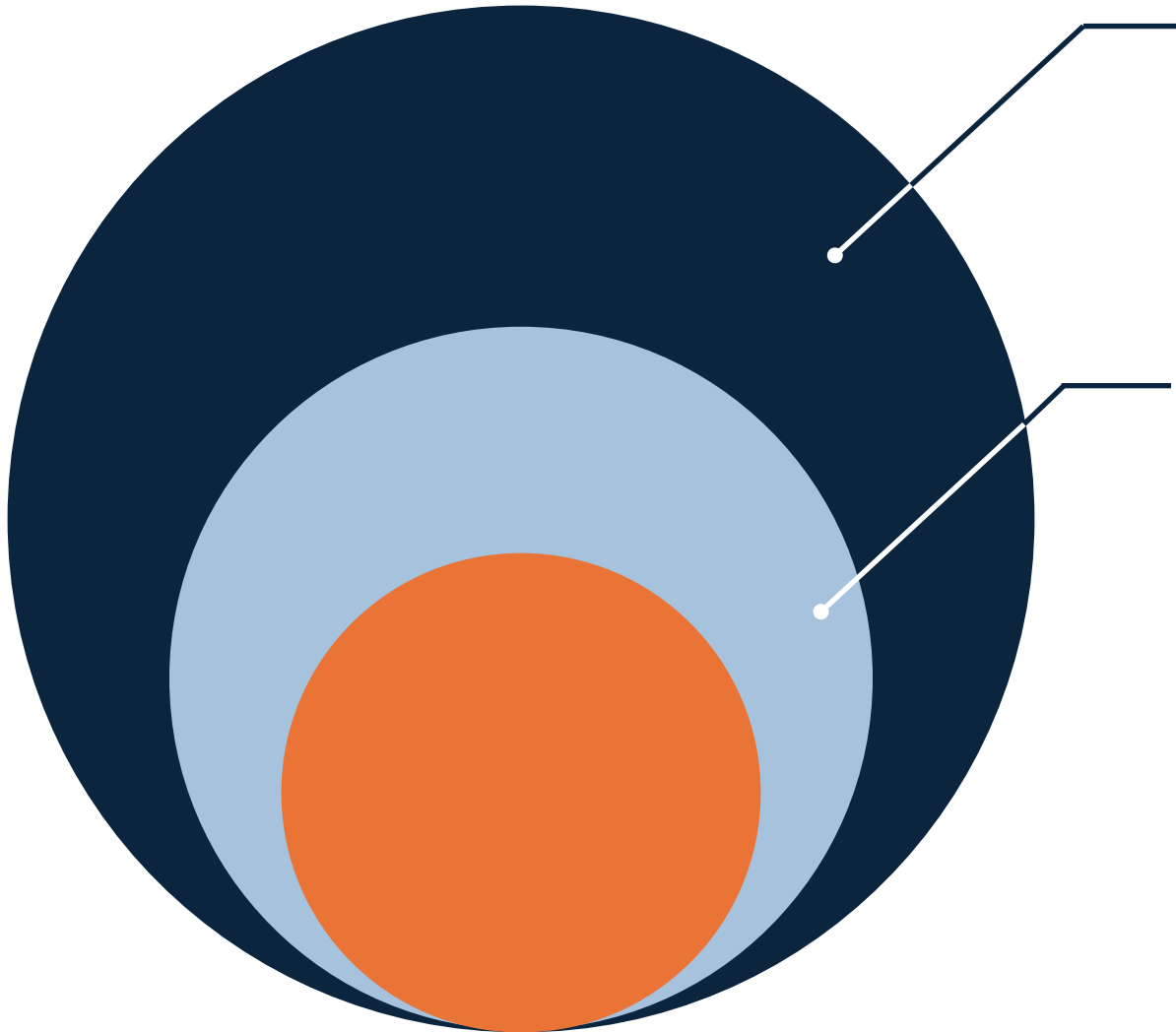
Future Networks Innovation

Customer benefits: Cost reduction by improving network utilisation + improved customer choice

Example 'problems':

- Minimum demand
- Hosting capacity constraints
- Electrification demand increase

Enterprise Innovation scope



All innovation at SAPN

- Tracked and reported on by EI team
- Supported by our innovation toolkit
- Excludes business improvement

Strategic Innovation

- Select few 'game-changing' initiatives
- Run through the Innovation Pathway
- Business embedded delivery model (e.g. SAPS)
- Centralised innovation delivery model (e.g. Energy Masters)

Portfolio Pipeline Status (not exhaustive):

Future Networks Innovation

Customer Innovation

Asset Management and Operations Innovation

Backlog

- Flexibility Marketplace
- CER cyber security
- Distributed emergency under-frequency response

- Self-service connections
- Solar for renters

- Automated fault location
- Drones for inspections
- Emergency services data sharing

Developing

- N/A

- Vulnerable Customers
- Enabling EV Chargers on Poles

- Stand-Alone Power Systems
- Computer Vision
- Digital Twin (LiDAR)

Delivering

- Flexible Exports
- Flexible Connections for C&I
- Community Batteries
- Market Active Solar

- Energy Masters

- Satellite imagery for crop risk
- Risk-Cost model
- Murray River Flood model

Innovation Advisory Group

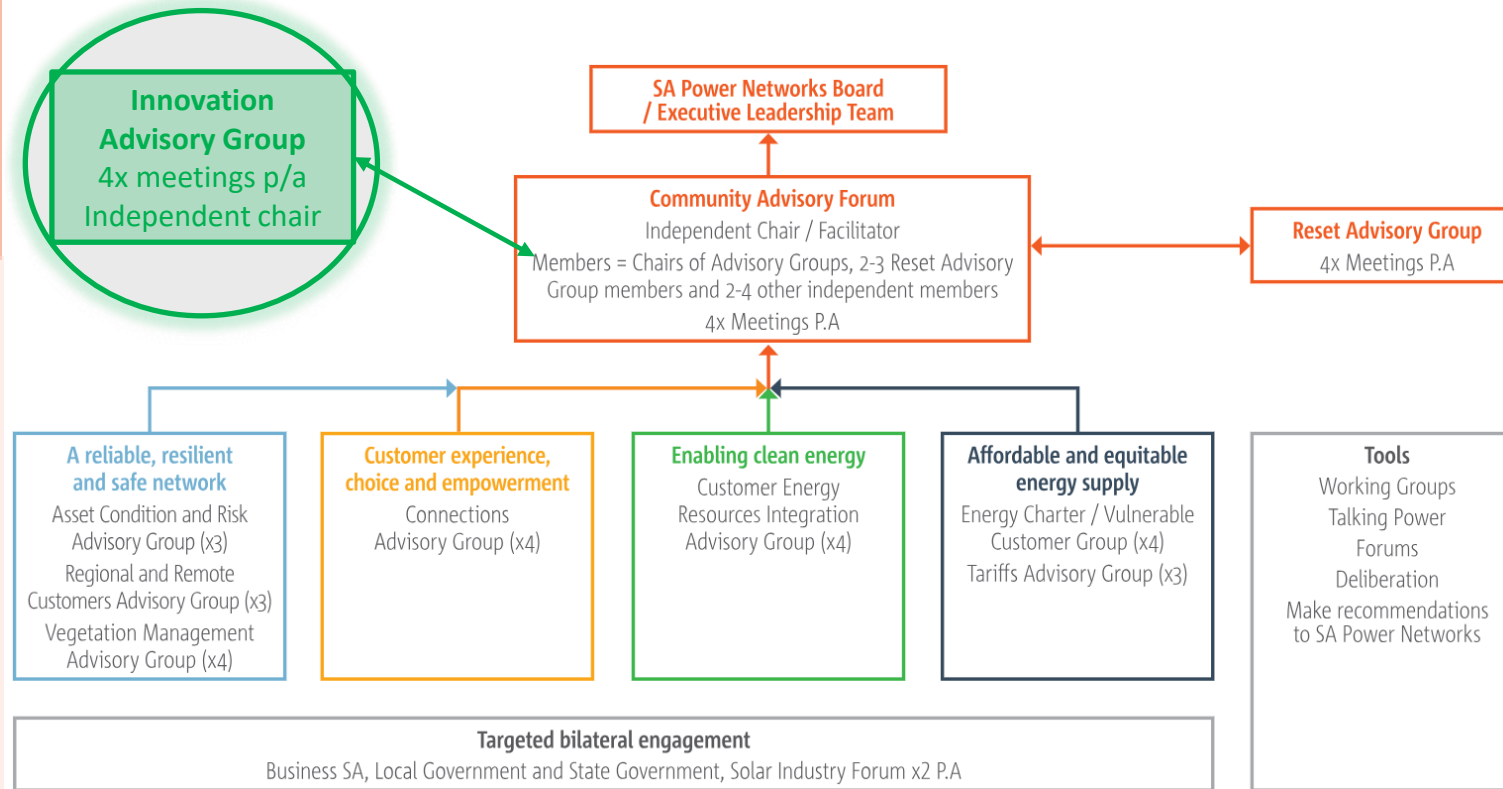
Purpose

Provide customer and industry input to the prioritisation, selection and delivery of Innovation Fund projects*

Key objectives:

- provide input into **project selection, prioritisation and delivery** of Innovation Fund activities.
- monitor delivery and discuss **how knowledge from Innovation Fund projects will be shared** with industry, consumers and regulators.
- provide **input on customer or industry problem statements or ideas for innovation** arising from other Advisory Groups.

Members: *community & industry representatives from CAF & other AGs*



*To assist holistic prioritisation of Innovation Fund projects, IAG will be provided with visibility of SA Power Networks broader Innovation Framework and other relevant innovation projects that fall outside the Innovation Fund.

<https://www.aer.gov.au/system/files/2024-12/SAPN%20-%20205.13.4%20-%20Innovation%20Fund%20-%20December%202024%20-%20Public.pdf>

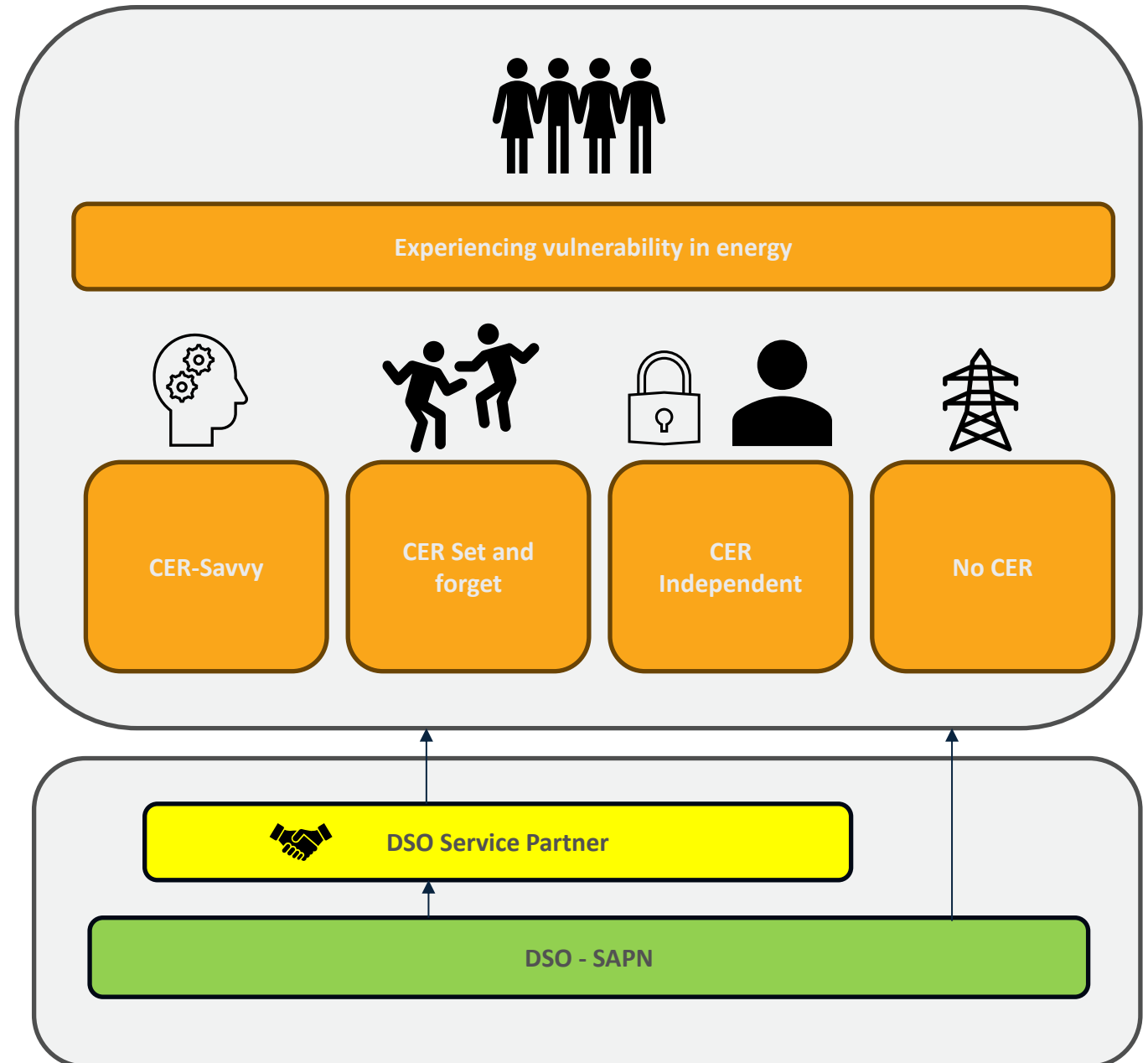
Future Customer Definition

As we transition to a Distributed System Operator (DSO) model, our customers will shift and evolve. They will vary in how they engage with energy, some will own and manage Customer Energy Resources (CER), while others will not, but all will be affected by the transformation.

To truly support customers through this transition, we must evolve with them. This means recognising that:

- CER-Savvy customers will seek customisation, flexibility, and seamless digital experiences.
- CER Set and forget customers will want low-effort, reliable services that 'just work'.
- CER Independent customers may choose minimal contact and grid interaction.
- No CER Customers will need access to fair and beneficial outcomes. Many may face barriers to adopting CER, such as cost, apartment complexes, rental restrictions, or lack of access.

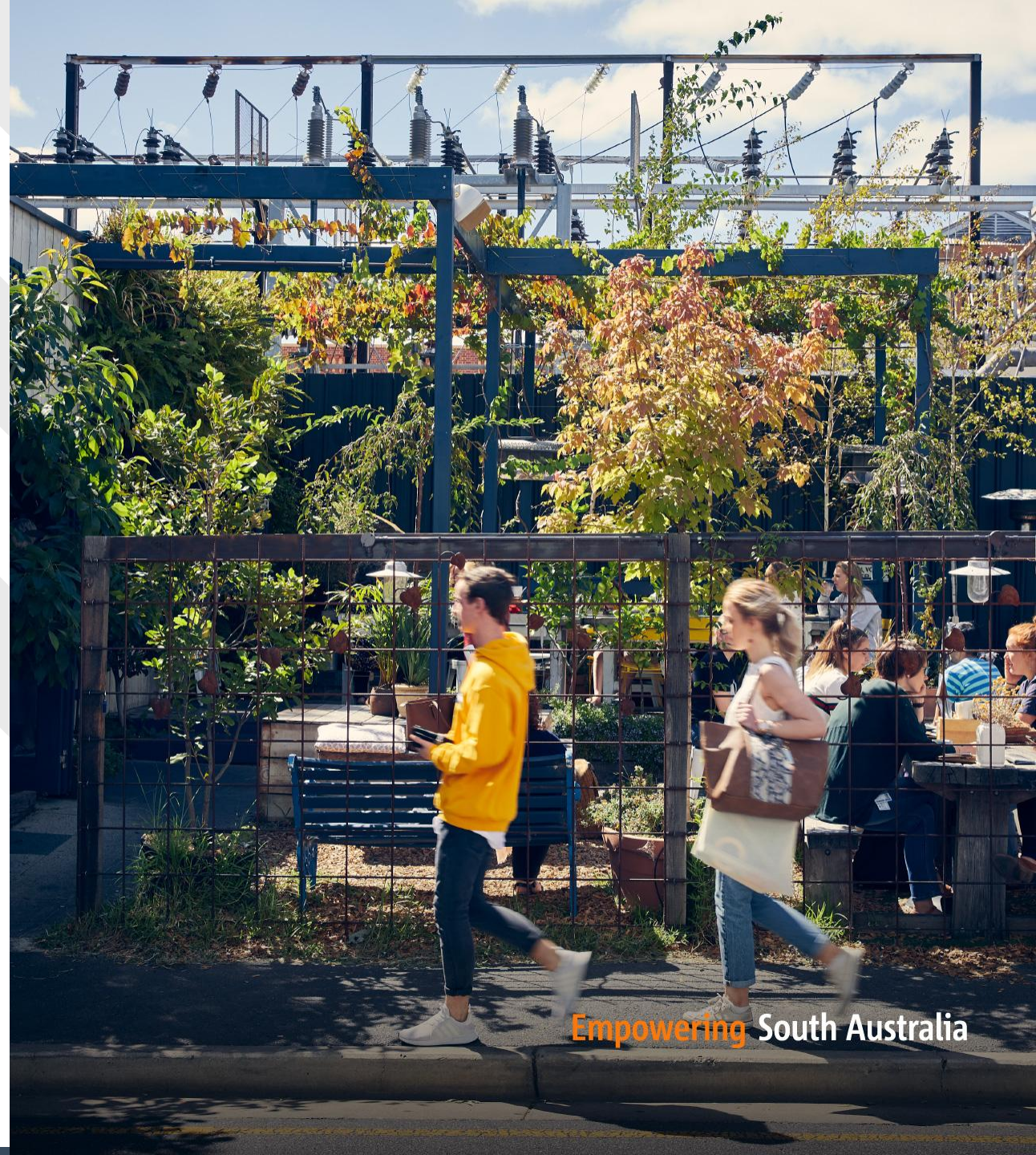
Importantly, customers are not fixed in one category, they may move between these categories over time, depending on life stages, digital access, financial circumstances, and personal preferences.



Innovation Advisory Group

Mark Yates

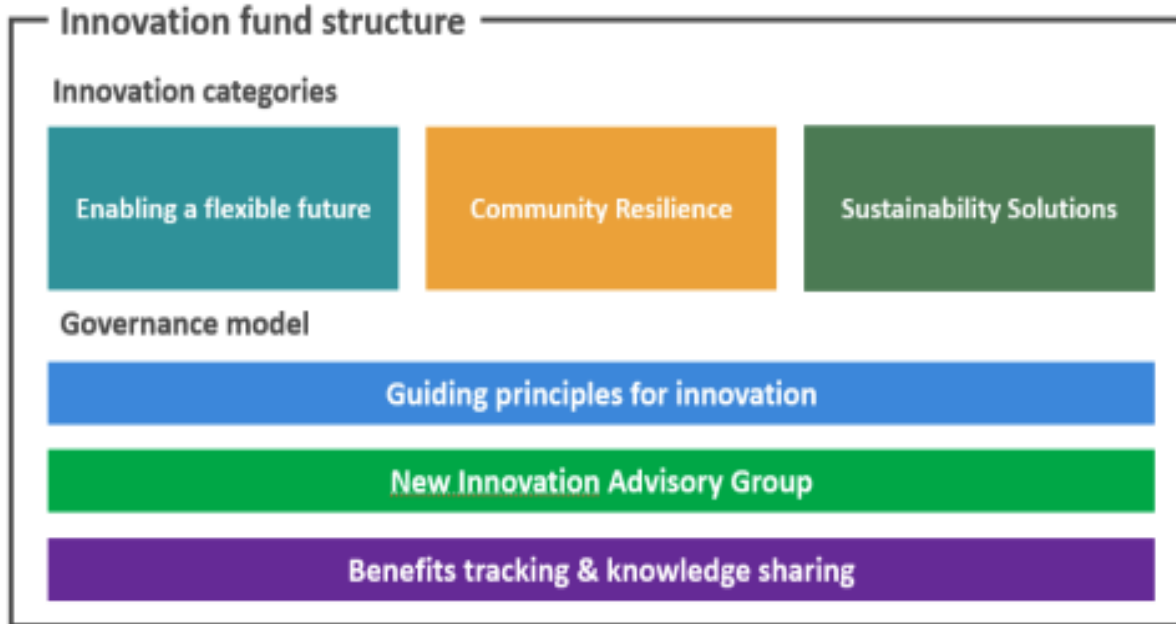
11-11:05am (5 minutes)



Empowering South Australia

Innovation Fund Structure

Figure 1 Innovation fund structure



- 14 Members from varying diverse range of backgrounds (James Brown + Michelle Howie SAPN)
- 20 Million Fund approved by AER between 2025-2030
- Unspent funds between 2025-2030 returned to customers
- 3 x Categories (Enabling a Flexible Future, Community Resilience, Sustainability Solutions)
- 9 x Projects in Total
- **Enabling a Flexible Future – (8)**
- **Community Resilience – (1)**
- **Sustainability Solutions – (0)**

	Priority	Project	Capex (\$2025)	Opex (\$2025)	In original proposal?
Flexibility	1	CER market operations interface pilot	\$2.62M	\$0.35M	✓ ¹¹
Flexibility	2	Advanced Network Planning for a Flexible Future trial	\$1.09M	\$0.37M	
Flexibility	3	Local Flexibility Marketplace pilot	\$3.52M	\$1.55M	✓ ¹²
Resilience	4	Emergency Services data sharing	\$0.51M	\$0.09M	✓
Flexibility	5	Self-Serve Connections Platform Pilot	\$1.81M	\$0.39M	✓ ¹³
Flexibility	6	Co-optimising network real and reactive power trial	\$2.83M	\$0.32M	
Flexibility	7	Distributed emergency underfrequency response pilot	\$1.07M	\$0.69M	✓ ¹⁴
Flexibility	8	Shared market flexibility pilot	\$1.26M	\$0.13M	
Flexibility	9	Integrating DOEs and system services pilot	\$1.13M	\$0.10M	
	TOTAL EXPENDITURE		\$16M	\$4M	

Box 1: AER assessment criteria 1

1. **Innovative** – projects must be transformative;
2. **Expenditure objectives** – the justification for the proposed projects must be linked to the expenditure objectives in the NER;
3. **Alternative funding** – explain how existing incentive schemes, allowances, government grants have been genuinely exhausted;
4. **Project scaling and implementation pathway** – projects must be prudent from a scale perspective for a trial / pilot phase, including success factors / criteria applied to trials / pilots to assess whether it proceeds to the business-as-usual phase; and
5. **Stakeholder support** – there is support for the innovation expenditure

Link to Innovation Business Case

<https://www.aer.gov.au/system/files/2024-12/SAPN%20-%205.13.4%20-%20Innovation%20Fund%20-%20December%202024%20-%20Public.pdf>

Discussion | Questions | Comments | Observations



Customer Outcomes Update

Erin Hampton

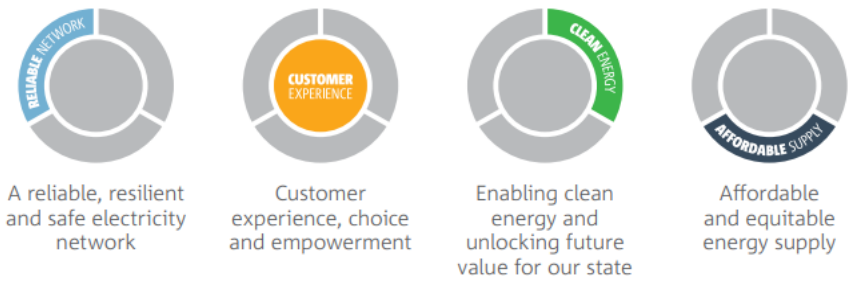
11:05 – 11:15am (10 minutes)



Customer Outcomes – CAF Chair Priorities

- KPIs/ KRAs
- Service Installation Rules and interpretation (accountability/ issues)
- Flexible connections and links to CERIAG

CAG Customer Outcomes



Area	Outcome	Metric
Reliable, safe and resilient network	Increase knowledge of major safety concerns within electrical industry.	SAPN/OTR to provide updates including regulation round up information and safety trends/breaches at meetings.
Customer experience, choice and empowerment	Increase understanding of concerns and challenges regarding connections projects focusing on time delays and communication.	CAG included in development of KRAs and KPIs Connection statistics presented and discussed at CAG meetings. CAG members review survey/data for insights collection process
Clean and green energy	Identify opportunities to collaborate with network innovation projects in the CER space	Investigate cross collaboration opportunities with CERIAG regarding Flexible Connections project.
Affordable and equitable supply	Seek and facilitate opportunities for collaboration and ongoing engagement with electrical contractors and engineering consultancies to increase efficiency of connections processes.	As part of KRA/KPI conversation, CAG members investigate efficiency improvements. Hold an engineering consultancy forum and a workshop for major project/connections improvements

Continued.

Area	Outcome	Metric
Advocacy	CAG to advocate to state government regarding support for customers through LMRP	Group to write a letter to energy minister/DEM advocating for financial support for vulnerable customers through LMRP (escalated to CAF)
Innovation	Improve the connections process through the implementation of the new portal	CAG members are involved in testing the portal and provide feedback through portal progress updates at CAG meetings. CAG contribution to 1x initiative for IAG investigation.
Know your customer/ Data	Seek insights and feedback from customers throughout connections process.	Presentation on new Qualtrics system and Connections insights at group meetings

SEG/MEG Changes Roadmap

Andrew Lim/Spiro Bratis

11:15-11:35am (20 minutes)

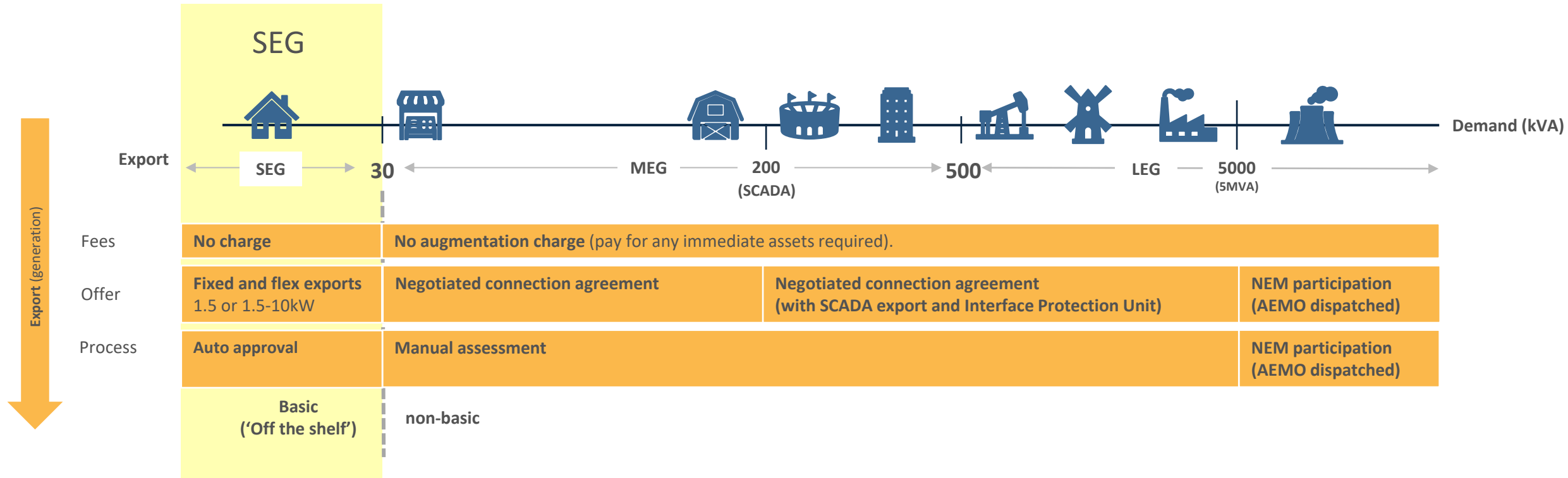


Purpose of this Update

- Share current initiatives to improve and simplify generation process:
 - Small Embedded Generation (SEG) reclassification
 - Expansion of Flexible Exports to Medium Embedded Generation (MEG)
 - Internal MEG streamlined changes
 - Simplified connection pathway for LV Large Embedded Generation (LEG) customers
- Indicative timeline and dependencies

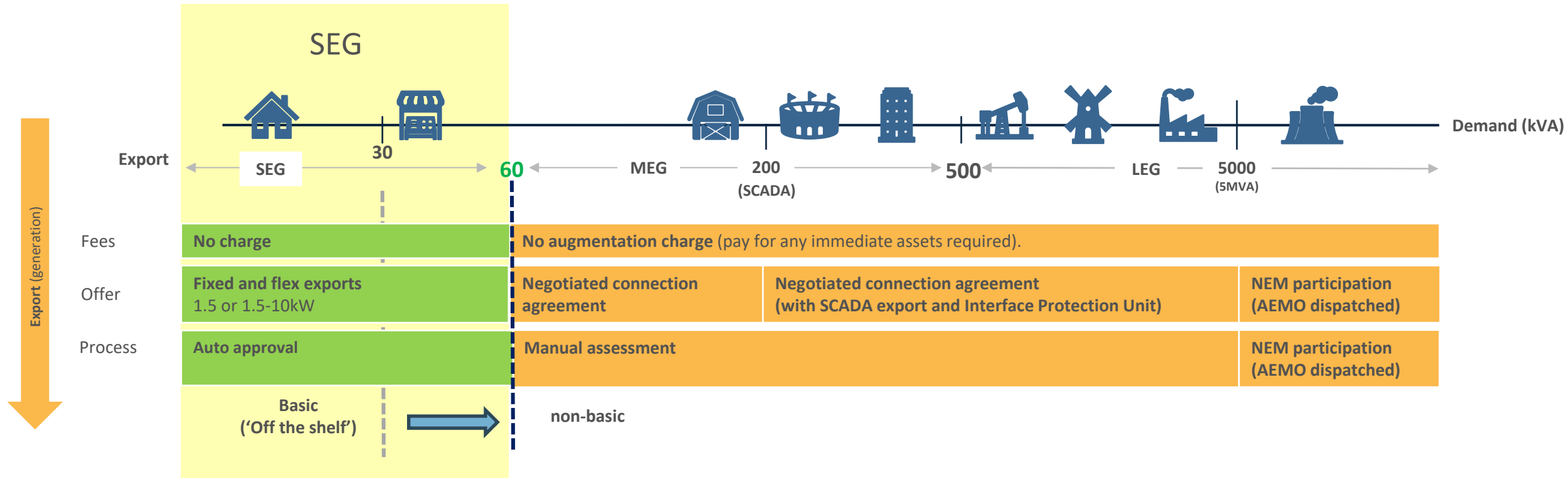


Current landscape – Small Embedded Generation (SEG)



- Maximum 10kVA PV and 10kVA battery per phase (Nameplate)
- Up to a total of 30kVA for 3 phase connections
- Consistent with Energy Network Australia (ENA)'s connection guideline

SEG Reclassification (options being considered)



- Up to a total of **60kVA** for 3 phase connections (20kVA per phase, nameplate)
- SEG Flexible Export maximum limit will still apply
- Technology breakdown is yet to be determined

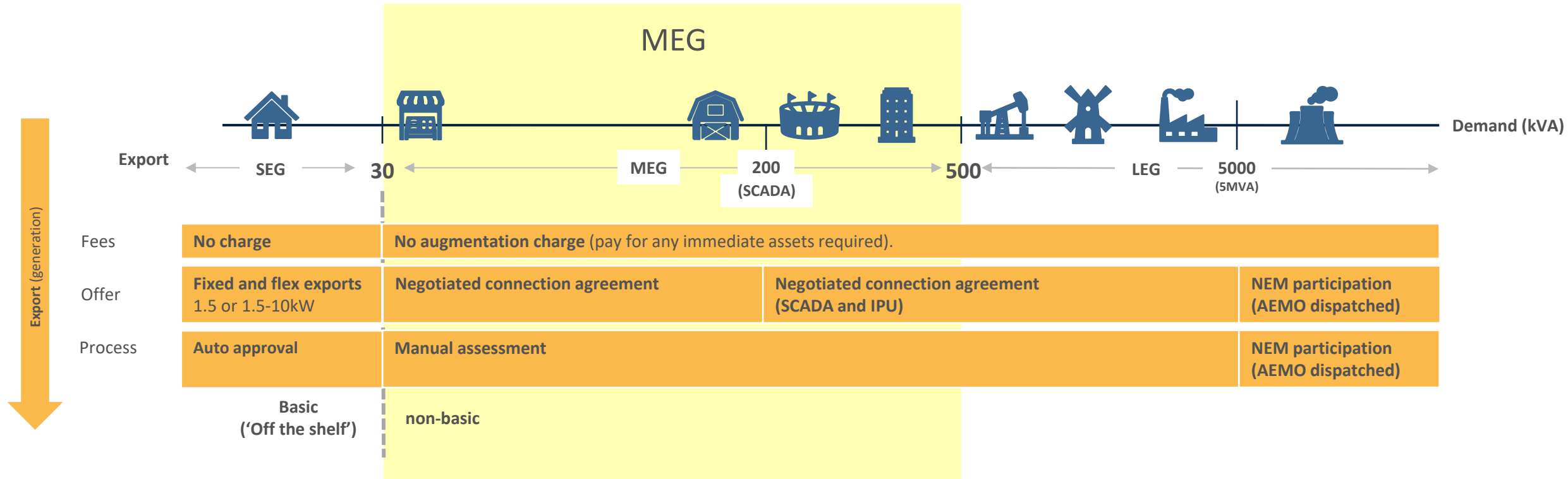
SEG Reclassification

(Current discussion & dependencies)

- Outcome of internal risk assessment
- Mis-aligned with export tariff threshold of 30kW export in 2025-30 Tariff Structure Statement
- Internal and external stakeholder engagement (industry, OTR, ENA and other utilities)
- Updates to regulatory documentation required (misalignment with The South Australian Electricity Act 1996, Clause 36AC)
- Customer portal and documentation changes including connection agreements and technical standards

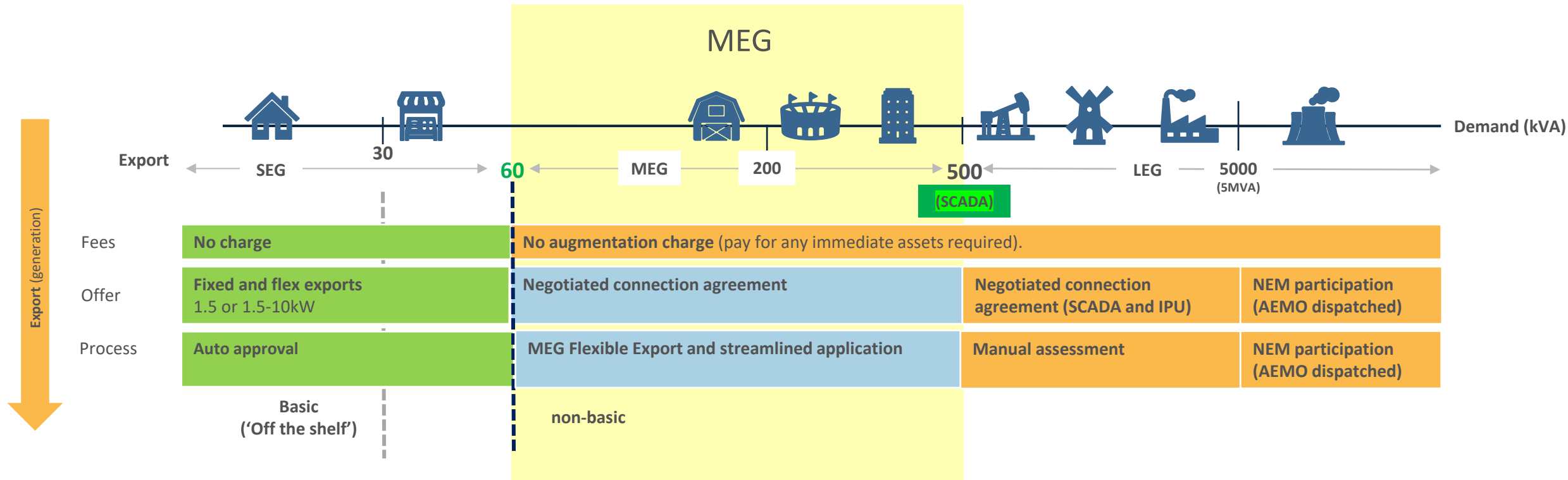


Current landscape – MEG Embedded Generation (MEG)



- Changes to AS/NZS 4777.1:2024 has been implemented
- Interface Protection Unit (IPU) and SCADA threshold at 200kVA
- Limited visibility and control for MEGs exporting <200kW

Flexible MEG Reclassification (options being considered)



- Implement **Flexible Export** for MEG connections (CSIP-AUS)
- **Remove** firm requirement for Interface Protection Unit (IPU) and SCADA for MEG. Requirement will apply for generation >500kVA
- Review witnessing requirements and automate compliance process

Flexible MEG

(Current discussion & dependencies)

- Outcome of internal risk assessment (IPU and SCADA) including deviation from industry practice
- Readiness of inverter manufacturers and customers
- Modify and extend automated compliance process to MEG sites
- Internal and external stakeholder engagement (customer working group, manufacturers, OTR, ENA and other utilities)
- Customer portal and documentation changes including connection agreements and technical standards



FLEXIBLE MEG PROCESS

Our purpose:

To act as the key liaison between customers and installers, ensuring the effective management of MEG applications (31kVA – 500kVA).

- **How we manage MEGS today:**

- **Initial Assessment:**

- Review applications for complete and accurate documents (e.g. SLDs, data sheets, site and customer info).

- (Note: Timelines may vary based on customer/installer responsiveness).*

- **Engineering Review:**

- Verified documents reviewed by Connections Engineering Planning team for technical assessment.

- (Minimum 2-week lead time).*

- **Offer and Contract:**

- Formal Offer Letter and Ongoing Connection Contract issued within 65 business days of receiving all required information.

- **Site Witnessing:**

- Co-ordinate and schedule witnessing of the installed system.

- **Finalisation:**

- Close out the application following successful installation and compliance confirmation.



What is Changing?



Streamlined Process Through Data Analysis

Data analysis has enabled SA Power Networks to manage network risk safely while streamlining the connections process.

Customer Benefits:

- Connections Central manages the entire application process, bypassing the need for Connections Engineering Planning review.
- Reduced offer lead times for customers.
- Removal of witnessing requirements for systems complying with AS/NZS 4777.1 (full export only). CSIP-AUS compatible.

Note: Witnessing still required for export-limited systems and generation >200kVA.

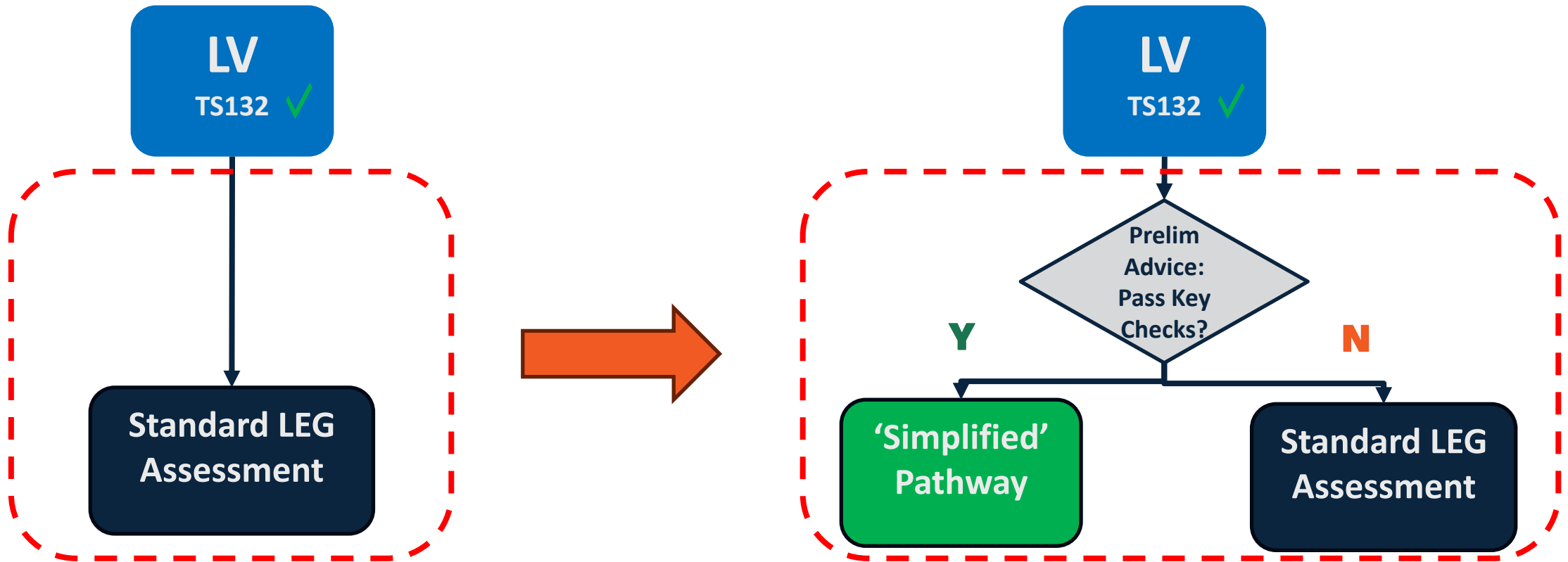
- Connections Central oversees the full close-out process in collaboration with the customer and installer.
- Cost benefit to be passed onto customer once implemented.
- Interface protection threshold increased to 500kVA - Q1 2026.

A New Simplified Pathway for Low Voltage Large Embedded Generation (LEG) connections

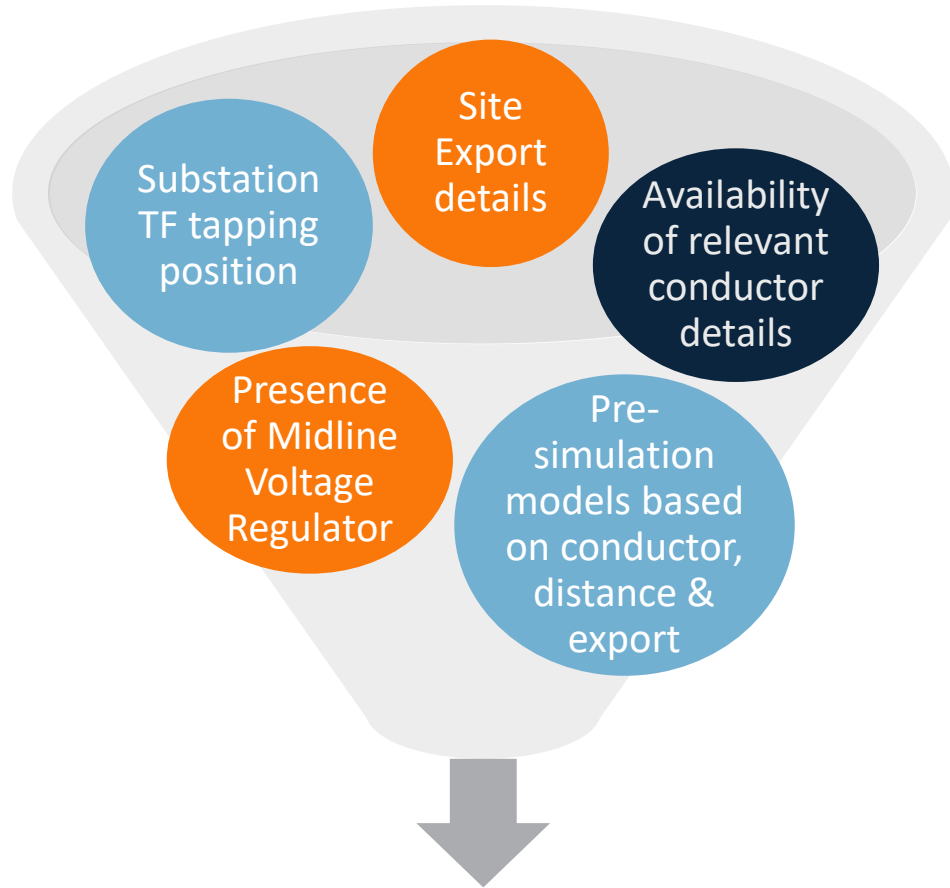
- This trial is designed to streamline the connection assessment for eligible **LV connected** LEG proposals **up to 1.5MVA**
- Providing **faster** and **more efficient** outcomes for our customers.



Functional Overview (>500kVA LV LEG customers)



Key Checks during Preliminary Assessment for LV LEG



Eligibility of 'simplified' LV LEG pathway

Existing Data Analysis:

50% of past LV LEG projects passed the Key Check assessment

What does it mean for eligible customers?

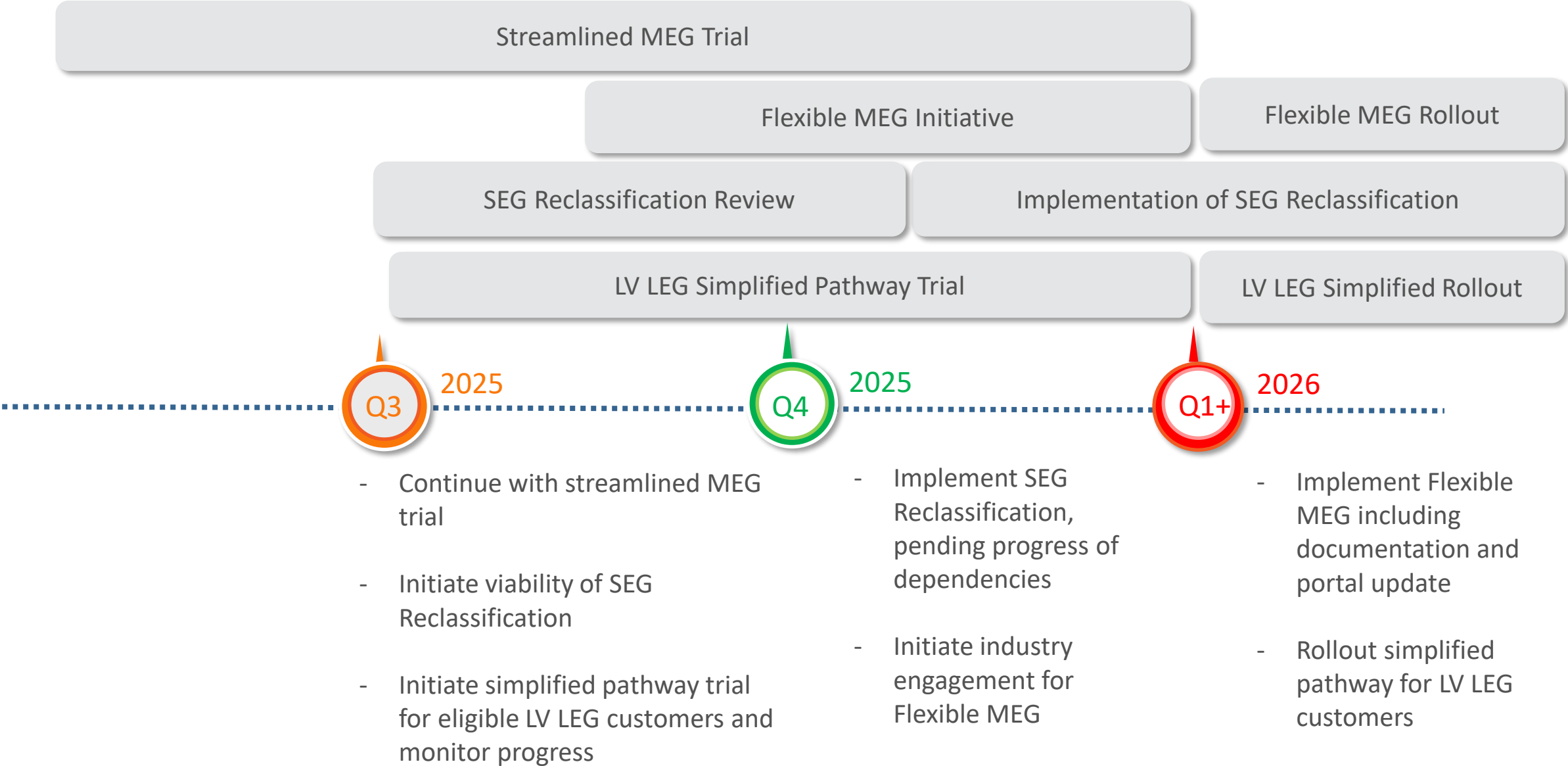
- Bypasses High Level Feasibility (HLF) Stage
- Reduced Engineering Assessment (Similar to MEG)
- Deliverables: Basic MEG Engineering Report
- Reduced internal turnaround time
- Cost benefit to be passed onto customer once quantified and implemented formally

Next Steps:

This initiative may be implemented **from August 2025** on a trial basis.

Indicative timeline

Activity



Activity Detail

Industry Roadshow and SIR Update

James Case

11:35-11:45am (10 Minutes)



Keeping the industry up-to-date

REGULATION ROUNDUP

ISSUE 54 | August 2024

A bulletin for Electrical, Gas and Plumbing industry workers brought to you by the Office of the Technical Regulator

IN THIS ISSUE

Message from the Technical Regulator
Welcome to the 54th edition of Regulation Roundup.

SAPN
SA Power Networks expands Flexible Exports option.

3

FOR TECHNICAL ENQUIRIES:

Electrical
P: (08) 8226 5518 | (8:00am - 4:30pm)

Gas
P: (08) 8226 5722 | (8:00am - 4:30pm)

Plumbing
P: 1300 760 311 | (8:00am - 4:30pm)

Government of South Australia

be energy

Service and Installation Rules released – May 2022

By SA Power Networks May 2022

SA Power Networks improves Service and Installation Rules through stakeholder consultation

Following a 12-month review of the Service and Installation Rules (SIR) with a broad range of stakeholders across the industry, our new rules have been published.

Why the change?

The key objective was to connect stakeholders across the industry and make the content of the SIR and make it easier to apply.

What's different?

The new Service and Installation Rules published to our website include key changes being:

- Review
- Restructure
- Add
- Create
- Inform

What you can do

STANDARDS BULLETIN

To: Managers, Leaders, Employees & Contractors
Subject: Mechanical protection of consumer mains
Date: 23 September 2024
Bulletin no: 354

BACKGROUND

Recent feedback from the industry has raised concerns over the steel thickness for the mechanical protection required over consumer mains.

SA Power Networks' current Service and Installation Rules (SIR), clause 7.5.1.2, states 3mm galvanised steel shall be installed over all exposed consumer mains wiring enclosures.

Whereas 3mm thickness will remain a requirement for consumer mains attached to SA Power Networks Stobie poles installed on road reserve/public lands, we have reviewed this requirement for the mechanical protection installed in other applications.

ACTION TO BE TAKEN

Consumer mains installed in single domestic, non-domestic, multiple installations, car parks and driveways shall be installed in heavy-duty conduit, with additional 1.6mm galvanised steel coverage.

The 1.6mm galvanised steel coverage may be, but not limited to, a top hat design, typically installed under domestic main switch boards (MSB), sheet steel attached between free standing MSB support poles, figure 1, or covers for ladder rack/tray attached to structures, Stobie poles on private property, figure 2.

The 1.6mm galvanised steel requirement and unprotected consumer mains shall be replaced by clause 7.5.1.2.

Figure 1

Figure 2

Technical Knowledge Base (TKB)

Technical Knowledge Base (TKB)

By: Alan Lee - Network Standards Manager

Bulletin Validity: From: 23 September 2024 until further notice

Contact: J Case: 0403 582 220

Asset Strategy & Insight - Network Standards

Service and Installation Rules

Released 12 May 2025

Published: May 2025

South Australia

For people to be added they need to email customerservice@sapowernetworks.com.au

SA Power Networks

facebook

24 June 2025

Attention all builders and sparkies!

The 2025 Service & Installation Rules (SIR) are now in effect – following an extensive industry review with input from the Office of the Technical Regulator (OTR).

These updated Rules are easier to read, understand and apply. We've also published a summary of the 2025 amendments so you can see what's changed and why.

Download your free copy straight to your device: sapowernetworks.co/service-and-installation-rules

You can continue to follow the previous version for work completed within 6 months of the new release (as per Regulation 11 of the Electricity (General) Regulations 2012).

Attention all builders and sparkies!

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Industry engagement

Roadshows February – June 2025

- NECA
- Master Electricians
 - 18 locations across SA (5 metro and 13 regional)
 - 1000 + attendees (not including OTR, Sponsors, Wholesalers, SA Power Networks regional staff)
 - Both NECA and MEA attendees received CPD solar points approved through SAA
 - Last 5 roadshows we provided 200+ printed copies of the SIR and the 2025 Amendments document

Industry partner - presentations

- Rexel – wholesaler event, 250+ RECs (Adelaide Oval)
- Rawsons Electrical – REC (toolbox meeting at their premises)
- Mint Electrical – REC (toolbox meeting at their premises)
- Adelaide Urban Electrical – REC (upcoming - toolbox meeting at their premises)

Supporting OTR (upcoming regional visits)

- Kangaroo Island
- Yorke Peninsula
- Mid North

Key topics covered

Industry observations

- Meter isolators – installed by solar installer but remain un-connected (not wired in)
- Equipment certification – MSB from interstate (AS 16439 series)
- Interference with our network – why a REC cannot insert our service fuses

SIR updates – main topics discussed

- Alterations/repairs changes for the 2025 SIR
- Load limiting devices for repairs – before or after the revenue meter
- Mechanical protection
- Free standing MSB – specific installation requirements
- Community Titles Act – location for MSB (legislative requirements)
- Statutory easement provisions - for crossing third party property (legislative requirements)
- Dangers of excavating near SWER TF poles
- Split-phase SWER service provisions
- Clarifying “immediately adjacent” unprotected connection points up to 400A
- Additional protection for preliminary supplies – (URDs)
- Update on our new online services portal

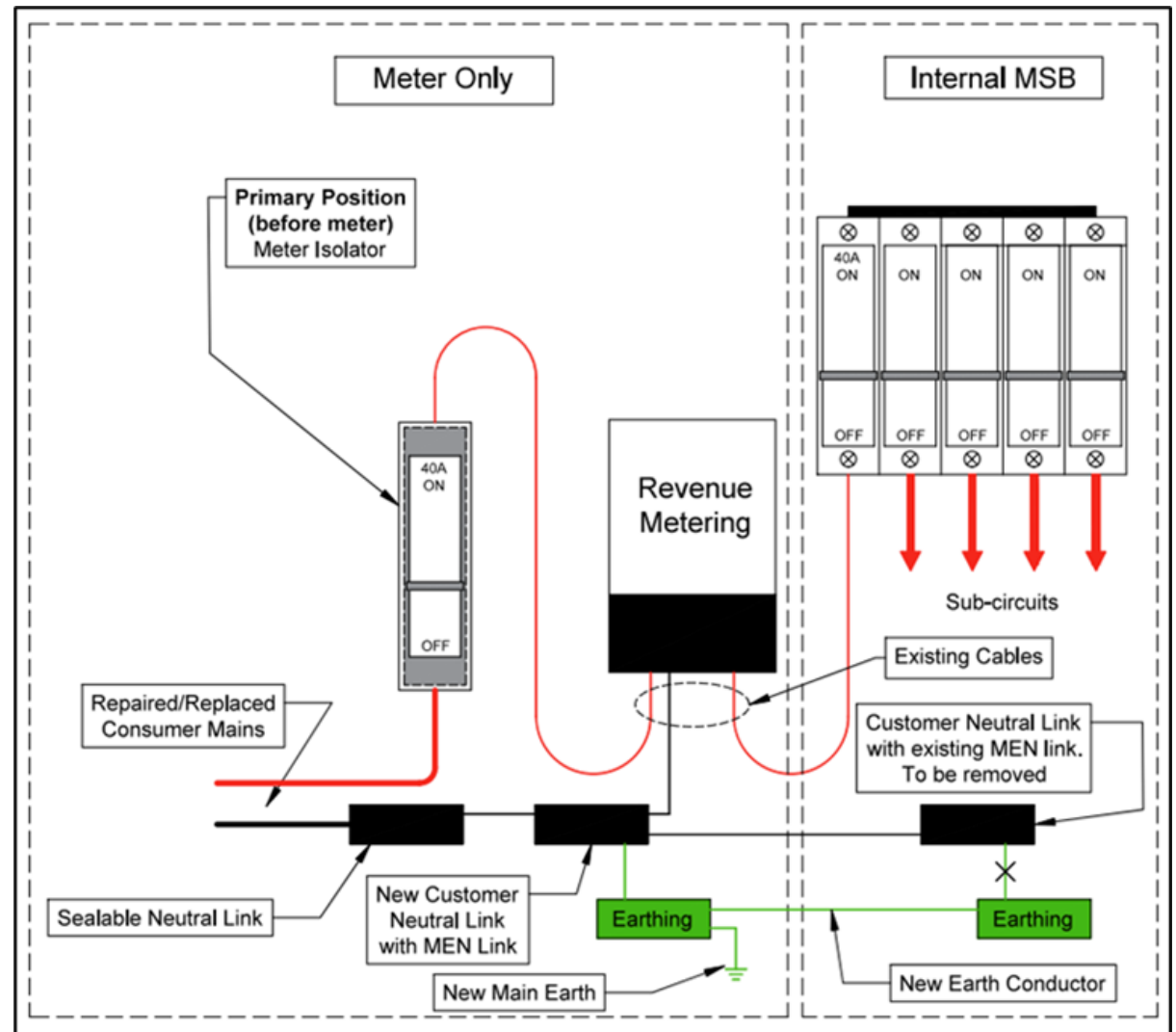
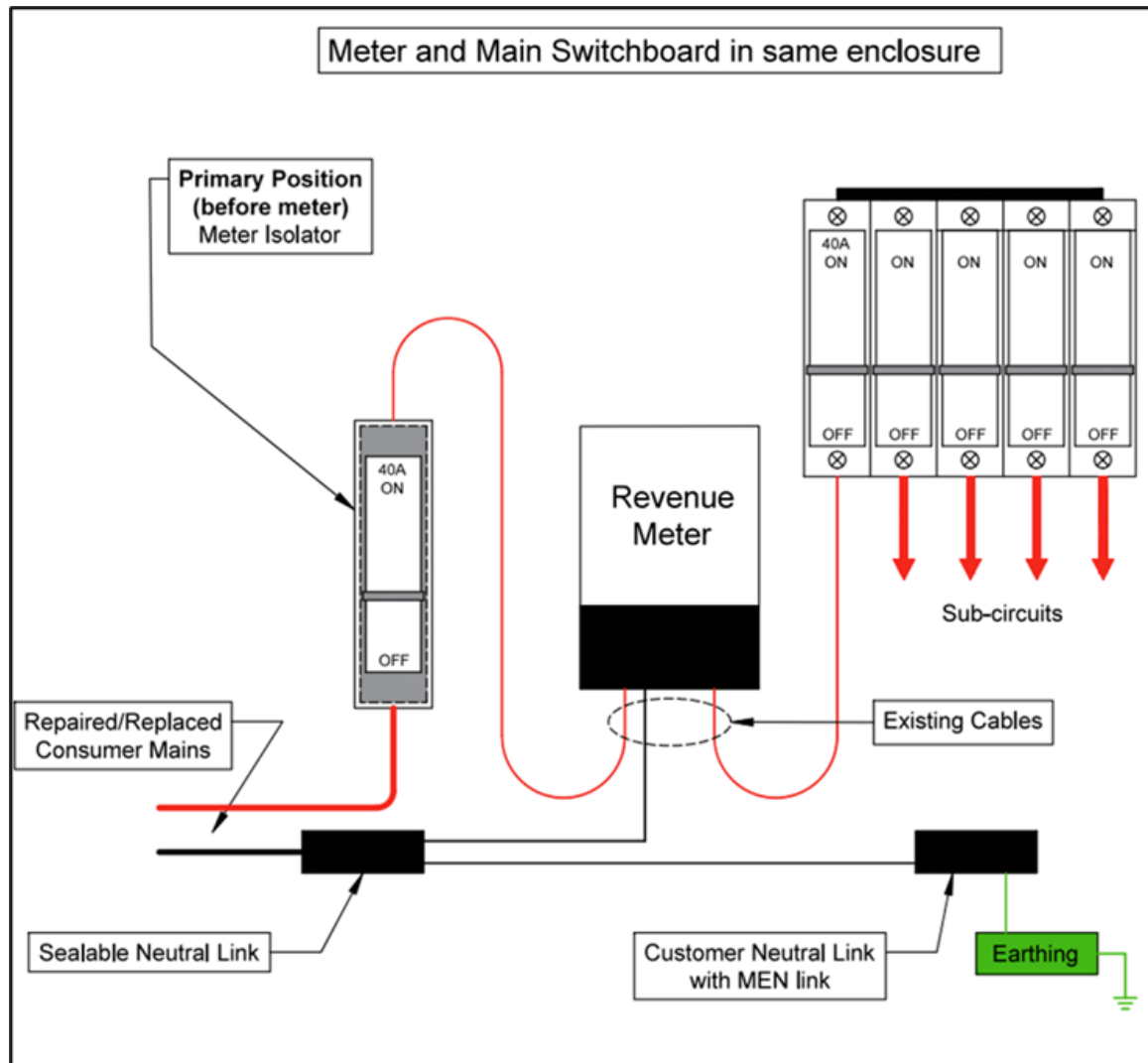
Solar updates

- Flexible exports
- CER compliance program

Summarising other 2025 SIR changes

Clause		Changes
5.3	Unauthorised interference with infrastructure (TIR)	Added NPU
5.6	Access requirements	Included NPUs to have the same access requirements as MSBs
5.9	Integrity of customer’s structures for SA Power Networks infrastructure (TIR)	Integrity of customer structures for attachment of SAPN brackets, 1kN
6.1.6	Prospective fault current	Updated requirements based on Standards Bulletin send out last year – 6kA min.
6.2.3	Harmonic distortion (TIR)	Updated to reflect changes in the Australian Standard
7.1.1	Number of connection points	Additional connection points can be considered for EV chargers
7.1.3	Identification of multiple connection points (TIR)	Specific connection terminals on a MSB for a temporary emergency generator, these shall be connected downstream of the revenue metering and after a physical isolation point. Ensures the revenue metering and SPDs cannot be energised from the alternative source.
7.2.2	Cables not suitable for connection into SA Power Networks infrastructure	Added in flexible cables for ≤ 100A
8.1.3 Figure 18	Single domestic installations clearance for a MSB (TIR)	Included boundary to maintain 600mm clearance
Figure 27	Customer private pole	Reviewed the wall thickness of the customer private pole, minimum thickness of 3mm.

Added more figures – response to industry

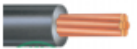
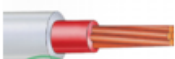


Hot topics – responding to the industry

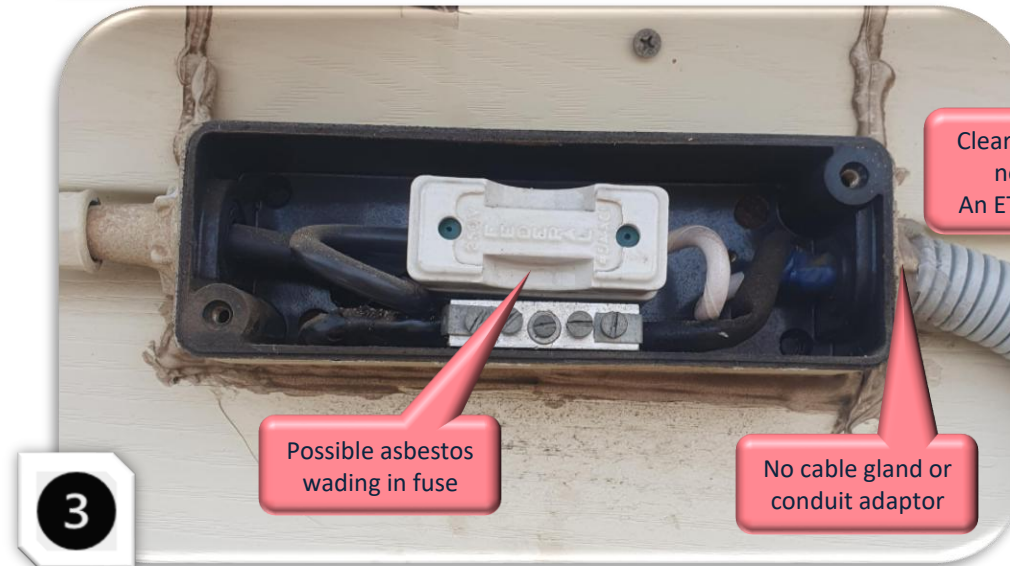
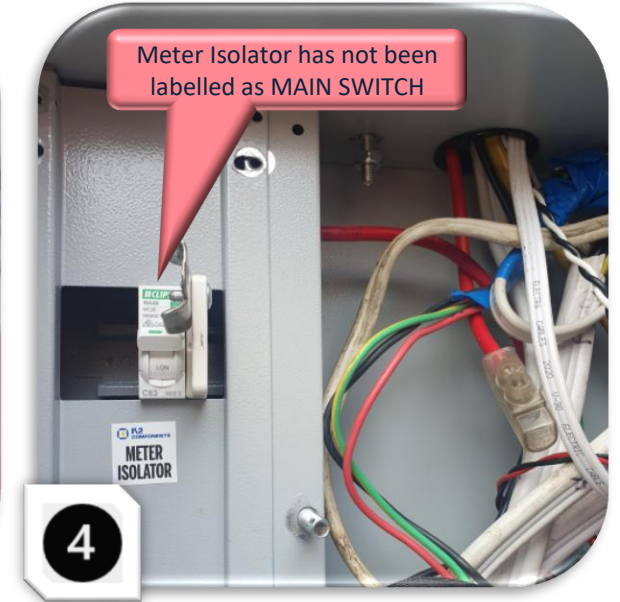
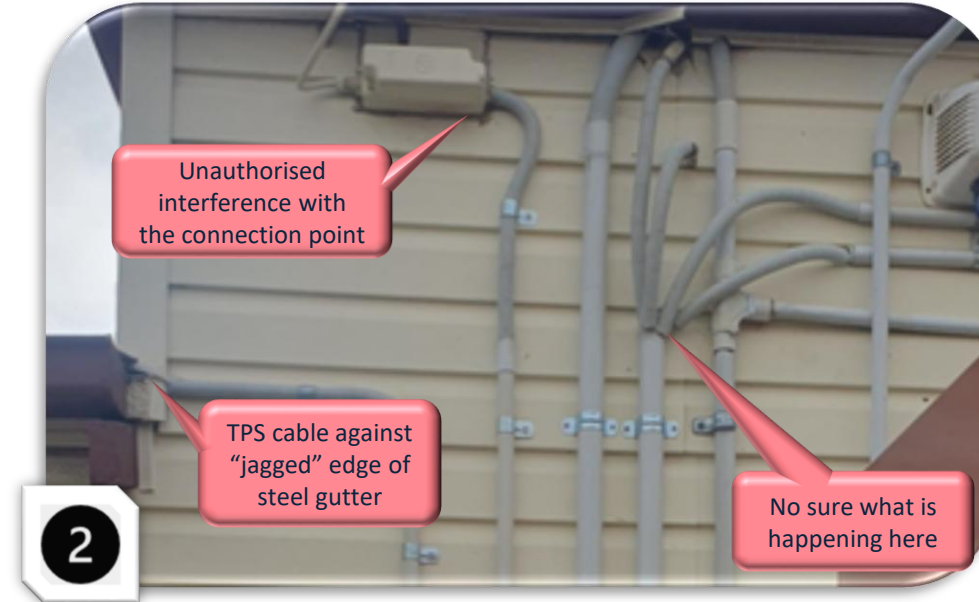
- Labelling of main switches
 - General requirements
 - Solar /alternative supplies
- Accessing SA Power Networks pits and pillars by REC
 - Installation of consumer mains
- Review of clearance between meter box and gas
 - Non-venting regulators –MT Barker
 - Bottle gas
- Review of eCoC / ATC form
- Vehicle protection for MSB
- Review of cables for $\leq 100A$ connection points
 - Quick reference table showing types of connection points and cable types



Cable types and preparation for connection requirements

		No.17 and 18 Box on house	No.17 and 18 Box on stobie pole	≤ 100A O/U fuse box on stobie pole	200A O/U service box on pole	Isolators /fused disconnects on pole	100A Fused service pillar	<100A un-fused pit	<100A pit with submersible fuses	>100A ≤ 400A un-fused pits
Table 9 Reference			Row 1,2,3	Row 4	Row 5	Row 6,7	Row 8	Row 9	This is new so not in table 9	Row 10
Neutral screened 		✓	✓	✗	✗	✗	✗	✗	✗	✗
PVC Insulated 	Building wire – single core, V-90 PVC insulated	✓	Can be used but non-preferred	Can be used but non-preferred	Can be used but non-preferred	Can be used but non-preferred	Can be used but non-preferred	✗	Can be used but non-preferred	✗
PVC SDI 	Single core cable, V-90, PVC Insulated and PVC sheathed	✓	✓	✓	✓	✓	✓	✓	✓	✓
PVC Circular 	Multi-core circular, V-90 PVC insulated, and PVC sheathed	✓	Preferred option. Remove at least 300mm of the PVC outer sheath before entering the connection point	Preferred option. Remove at least 300mm of the PVC outer sheath before entering the connection point	Preferred option.		Preferred option. Remove at least 300mm of the PVC outer sheath before entering the connection point	Preferred option. Remove at least 300mm of the PVC outer sheath before entering the connection point	Preferred option. Remove at least 300mm of the PVC outer sheath before entering the connection point	Preferred option. Remove at least 300mm of the PVC outer sheath before entering the connection point
XLPE /PVC Single core 	XLPE sheathed, PVC insulated		Remove at least 300mm of the XLPE outer sheath before entering the connection point							
XLPE/PVC Multicore 			Remove at least 300mm of the XLPE outer sheath before entering the connection point							
XLPE /PVC SWA Multicore 	XLPE insulated, PVC bedded, steel wire armoured, PVC sheathed		Remove at least 300mm of the XLPE outer sheath and the SWA before entering the connection point							

5.3 Unauthorised interference with infrastructure (TIR)



Reach out, we are here to support you

sapowernetworks.com.au

1

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Connections

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Maintenance

Industry

Enter your street, suburb or postcode

Use my location

er season is here.

Industry

Access your client's meter data

Facilities access

Annual network plans

Flexible Exports

Connect solar and EV chargers

Industry news

Contractor WHS Induction

Lighting

Network demand or tariff change request

Relevant agent

Request for network access

Resource library

REX Portal

Service & Installation Rules

Supplying to us

Tenders

2

Service & Installation Rules

Our [Service & Installation Rules 12069KB PDF \(Manual 32\)](#) set out the requirements for connecting electrical equipment to our network. It also sets out the responsibilities for those who engage in any work relating to the power supply of a person's property.

Service & Installation Rules (Manual 32)

(7 MB)

Download

Summary of Changes to Service and Installation Rules

(253 KB)

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Contact Us



Service and Installation Rules

SIR connection enquiries and technical support	SIR@sapowernetworks.com.au
General enquiries & support	customerservice@sapowernetworks.com.au
General enquiries & support	13 12 61
Faults & Emergencies 24/7 phone line	13 13 66
SIR technical support – David Pickard	0447 608 053
SIR technical support – James Case	0403 582 220
Connection Central – Enquiries / Access Permits	nao@sapowernetworks.com.au
Portal, REX, Web applications, general information	sapowernetworks.com.au

Other Business

- Future agenda items?
- Around the room

11:45-12:00pm (15 minutes)





Empowering South Australia