

# ASP Seminar

August 2025

**POWER**  
together



## Acknowledgment of Country

Endeavour Energy acknowledges the Traditional Custodians of Country where we work — the people of the Dharug, Wiradjuri, Dharawal, Gundungurra and Yuin nations.

We recognise their continuing connection to the land, waters, and community and pay our respect to Elders, past and present.



# Housekeeping

- Participant's microphones will be turned off for the seminar
- The seminar and slides will be recorded, available to download at a later date
- Each presenter will present with time for questions at the end of each segment
- Sessions will commence at their scheduled time, regardless of the previous session's end time (we won't start any sessions early)
- Feel free to ask questions in the Q&A chat, as it will be monitored by staff members. If we aren't able to get to it today, we will endeavour to provide an answer over the next couple of weeks
- Participants are free to come and go as they please, to whichever sessions they wish to attend

# Agenda

Time	Audience	Item	Speaker(s)
10:00am	ASP 1, 2, 3	Customer Network Solutions update Voice of Customer Process transformation	<b>Ashwin Prasad</b> Customer Connections Experience Manager  <b>Marilizza Vasquez-Chan</b> Customer Systems Lead
10:30am	ASP 1, 2, 3	Flexible exports & emergency backstop	<b>Barton Hellyer</b> CER Innovation Manager
11:00am	ASP 1, 2, 3	ASP Scheme Review update	<b>Markus Meier-Lindner</b> Manager, ASP Scheme
11:30pm	ASP 1, 2, 3	Standards update	<b>Amali Wickramasinghe</b> Lead Engineer - Mains
12:00pm		Lunch break	
12:30pm	ASP 1, 2, 3	Safety	<b>Riley Bryn</b> Public Safety Manager  <b>Tony Vellio</b> Customer Delivery Manager
1:00pm	ASP 3	ASP submission validation app	<b>Jonathan Lei</b> Customer Connections Manager
1:30pm	ASP 3	GIS & systems update	<b>Matthew Morgan</b> GIS Operations Manager
2:00pm	ASP 3	EIA - from paper to PEGA	<b>Gina Pavlovic</b> Head of Sustainability
2:30pm	ASP 1, 2, 3	General Q&A	<b>Ashwin Prasad</b> Customer Connections Experience Manager



# Overview

**Ashwin Prasad**  
Customer Connections Experience Manager

**Marilizza Vasquez-Chan**  
Customer Systems Lead

# Preparing for the future

**20,000** New connections

Estimated each upcoming year

**\$1B** New network assets

Over the next 5 years

**40%** Solar PV

Customer installations by 2029

**250K** Electric Vehicles

Expected in our network by 2030

**105K** Batteries

Expected in our network by 2035



# The Customer Network Solutions Team



**Stephen Sammut**  
Head of Customer  
Network Solutions



**Ashwin Prasad**  
Customer  
Connections  
Experience  
Manager



**Jonathan Lei**  
Customer  
Connections  
Manager



**Jude Perera**  
Customer  
Connections  
Manager



**Sunny Mehfooz**  
Customer  
Connections  
Manager



**Gabby Petrovski**  
Business Support  
Manager



**Marilizza  
Vasquez-Chan**  
Customer Systems  
Lead



**Ravi Lal**  
Customer Delivery  
Manager



**Tony Vellio**  
Customer Delivery  
Manager



**Mitch Heath**  
Operations  
Manager Metering



**Jonathan Lei**  
Customer  
Connections  
Manager



**Ravi Lal**  
Customer Delivery  
Manager



**Jude Perera**  
Customer  
Connections  
Manager



**Tony Vellio**  
Customer Delivery  
Manager

#### Construction Coordinators

- Adam McCrone
- Chris Bailey
- Dan Jolly
- Jason D'Angelo
- Matthew Innes
- Rafael Invernon
- Stuart Lomax
- Zoe Ross

#### Customer Network Engineers

- Ali Siddiqui
- Bhoomi Shah
- Parisa Sadeghi
- Romeo Cedino
- Saroun Ly
- Vishal Chavan

#### LGAs covered

- Camden Council
- Campbelltown City Council
- Liverpool City Council
- Shellharbour City Council
- Shoalhaven City Council
- The Council of the Municipality of Kiama
- Wingecarribee Shire Council
- Wollondilly Shire Council
- Wollongong City Council

#### Construction Coordinators

- Chris Jarrett
- Ben Vitucci
- Daniel McMullan
- Gav Nixon
- Greg Mitchell
- Greg Stuart
- Mark Hill
- Nathan Ward
- Tim Wrightson

#### Customer Network Engineers

- Albert Lo
- Darwesh Swamy
- David Ho
- Eugene Lorenzo
- Mala Jayasekara
- Raj Kumar Adhikari
- Vasan Naidoo

#### LGAs covered

- Bathurst Regional Council
- Blacktown City Council
- Blue Mountains City Council
- City Of Parramatta Council
- Cumberland Council
- Fairfield City Council
- Hawkesbury City Council
- Lithgow City Council
- Mid-Western Regional Council
- Penrith City Council
- The Council Of The Shire Of Hornsby
- The Hills Shire Council

# More than just an improvement on E2E timelines

## Digital transformation of our Connections process

- Launched the Connections Portal in 2022, digitising 8000+ paper-based applications per year
- We are seeing a continuous increase in complexity of projects on our network. We are committed to ensuring we deliver these projects, safely and reliably, with a great customer experience

**Collaborating with our customers to provide valued support throughout the connections process**



Western Sydney Airport - Powering the first international airport built since the 1970s.



Sydney Metro are building 2 new metro lines and exploring the idea of becoming a generator to regenerate energy from their Metro trains to Endeavour Energy's 132kV network



In the last 2 years, we've worked on 5 large scale generators



We'll be delivering 6 Battery Energy Storage Systems (BESS) in the next 3 years



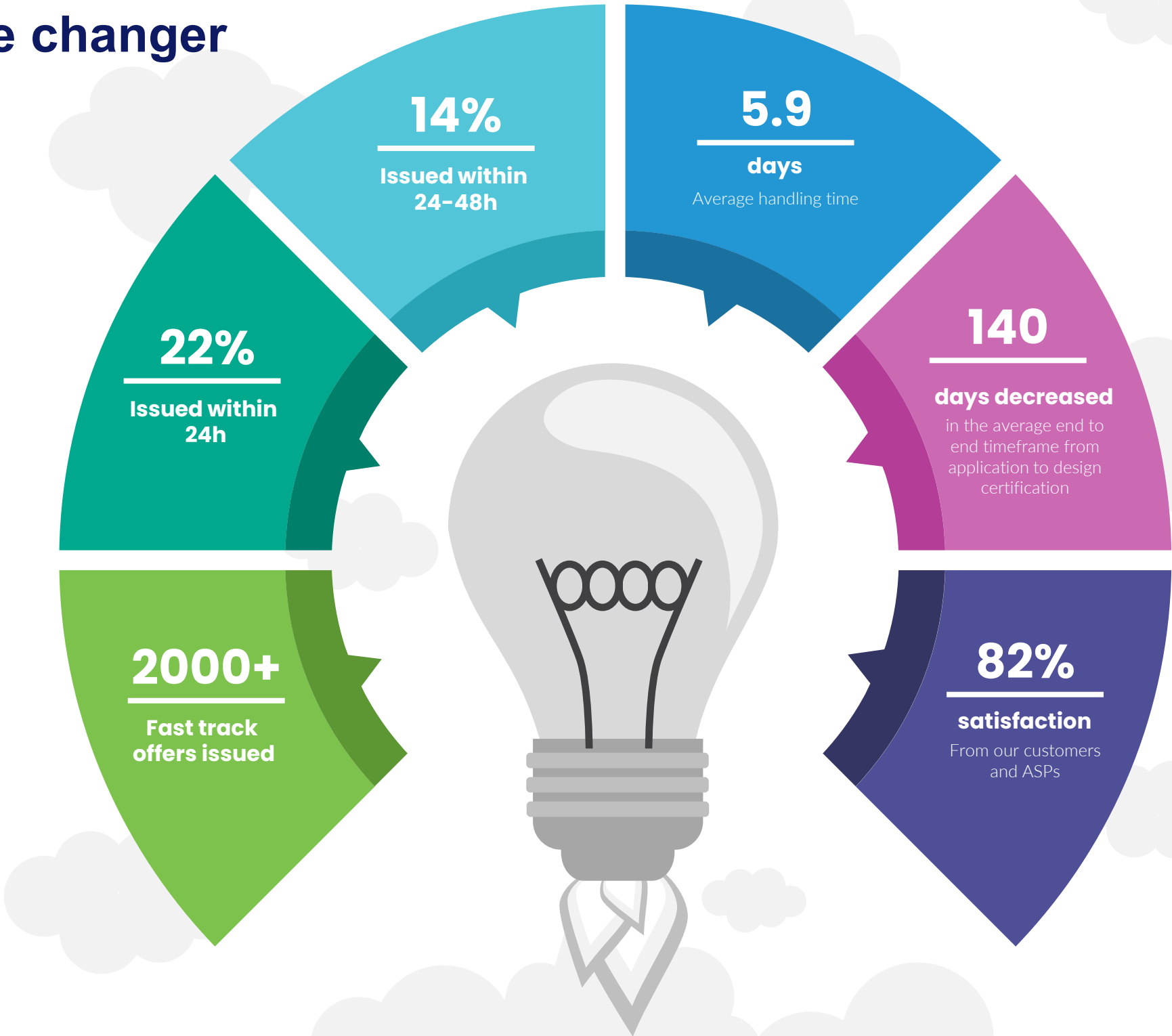
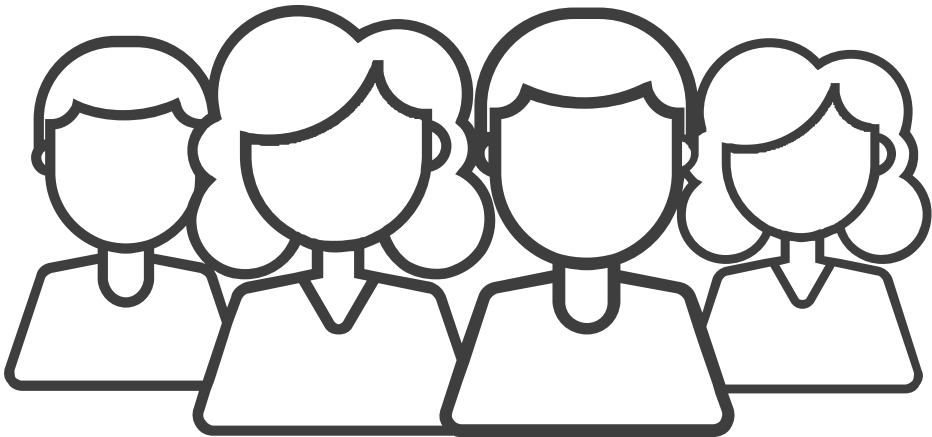
Powering Sydney's new CBD, a once-in-a-generation development. By 2036, half of greater Sydney's population will reside within the city's west. The new city will comprise 750,000 new dwellings and support 200,000 jobs.

# Fast Track connections - a game changer

“The new fast-tracked process ... has been excellent and one of the best improvements I’ve seen in the Level 3 process in my 20 years”

“This has been, by far, the simplest process and is refreshing for myself as a contractor as it gave my developer confidence in our ability”

“The fast-tracked process is really great. I work with Ausgrid, Essential Energy and Endeavour Energy and this is the best process of all the authorities by a mile”

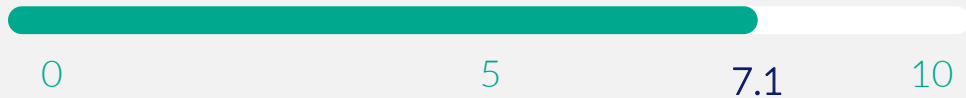


# Voice of Customer Surveys

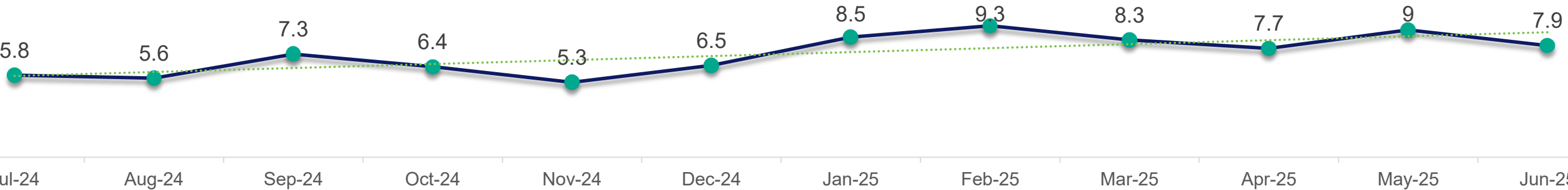
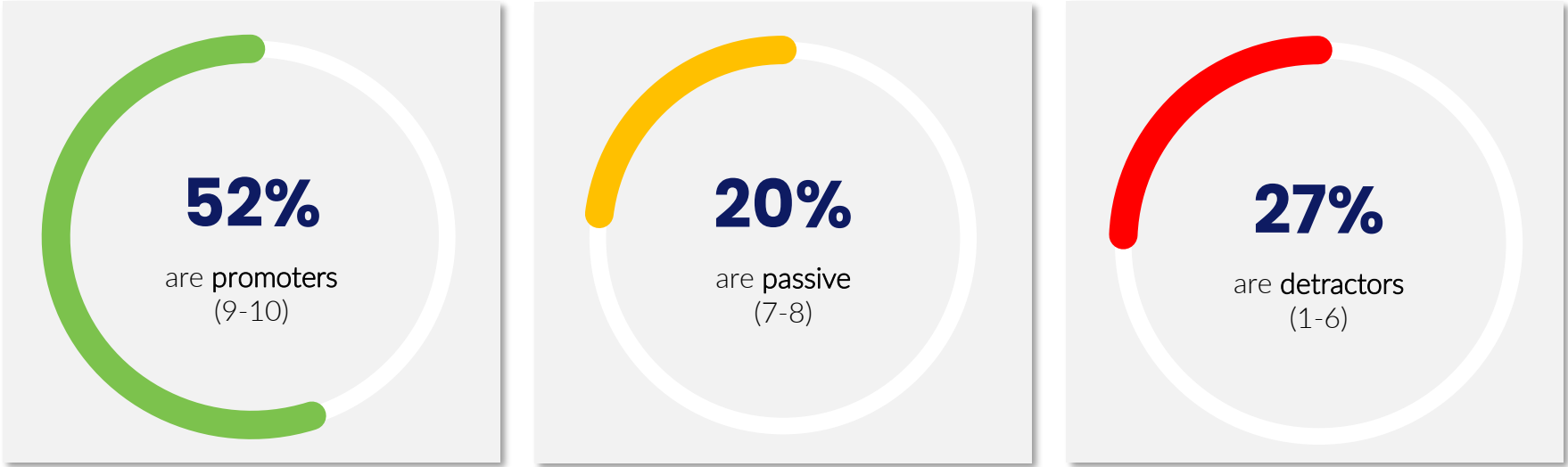
# Voice of Customer dashboard FY24/25

Surveys are sent out at Design Certification (ASP3) and Commissioning Complete (ASP1 & Developer) milestones in the project

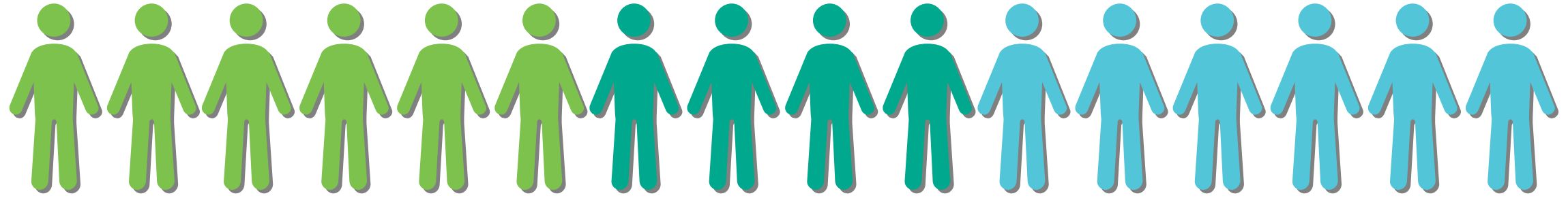
How would you rate your overall satisfaction?



278 responses



# What are ASPs saying?



"[CNE] was very helpful to get the design certified in a quick manner while we were under a critical timeline even while coming back from leave."

"The Endeavour side of things was fine, The challenge was working with the Client and it would be nice if there were more guidelines that could be provided to applicants/clients regarding the connection process as they don't understand it"

"[CNE] very accommodating as usual. The process was hassle free with a quick turnaround"

"Thanks to [CNE], who worked in with us to provide a good solution for a technically challenging Design. It's always difficult integrating with 30+ year old networks and we had to make some practical decisions on the best way to do this."

"Payments going to a single person and no PDF invoice is painful for clients. Designs need to be sent via email as the GoAnywhere portal does not work and CNE's do not get notifications delaying projects"

"[CNE] is a fantastic certifier with great communication. [They were] always approachable to discuss staging strategy, timing and the overall design."

"The CNE was very helpful, however we did have a problem with Endeavour Energy's GIS Records in the area being very outdated and incomplete, and there was no mechanism to have this fixed, which is a big problem."

"Thanks to [CNE] for the quick Certification, however this project did highlight a major discrepancy with how different CNE's and different L3 ASP's interpret the entry of Cable Lengths into the AVS, and needs to be clarified by Endeavour Energy as this altered the reimbursement amount."

# Our digital transformation

# Driving Our Digital Transformation Forward

“Your connection portal was great, and with the new update it is amazing! It takes me 5min to register a system when it takes me 10 days (at best) when it's on the other side of the fence with [other DNSP]...”

Information

For Environmental Impact Assessment (EIA), completing online training is a prerequisite before gaining access and submitting EIA applications.

Launch training

Welcome CDU

What can we help you with today?

Connections Portal

Manage a Network Application

Submit network connections applications, construction support requests, or technical enquiries.

Environment Portal

Assess Environmental Impact

To seek environmental advice or prepare and submit an Environmental Impact Assessment (EIA) for projects that Endeavour Energy approve

ESRI

View Network Map

View a map of Endeavour Energy's electricity network.

Important Notices

Read the Important Notices


Notifications relating to contestable works, procedures, processes and other important information e.g. Standards, HSE alerts.

Endeavour Energy

Home Saved applications Payments My cart Contact us

Project Number

JR



Create New

Select the type of application that you want to submit

Connect supply or move assets

Connect load or generation to a new or existing supply. You can also apply to relocate electricity assets or attach third party assets on EE assets.

Select →

Work near infrastructure

Request support when working on or near our electricity network typically for building or construction sites.

Select →

Electrical installation inspection

Request for a switchboard review, LV isolation and energise appointment, high voltage or hazardous inspection, or a dispensation request.

Select →

Make an enquiry

Make a preliminary enquiry for a connection service or request technical information.

Select →

Manage connection or asset

Select the network service that you require.

Connection of load

New connections, or extension to load requiring an upgrade, extension or replacement to the network or service. Includes state substation developments.

Select →

Subdivision of land

Subdivision developments including Tenants and Community life subdivisions. Excludes drive developments.

Select →

Connect a generator

New or increased generation system such as solar and battery.

Select →

Relocate or remove an asset

Move or remove assets, to release that impact, provide safety clearance, or to make way for new or modified infrastructure.

Select →

Connect public lighting asset

Connect supply to new public lighting for residential assets, main roads, pedestrian crossings and pathways.

Select →

Special service or facility access

Small roads - unroaded supply up to 3A installed in public places e.g. road requests, or request a Site Occupation Agreement to attach assets on EE assets.

Select →

Connect an embedded network

New connection of a private network to allow the connection of embedded customers by an embedded network operator.

Select →

Activity near our network

Select the construction service that you require.

Asset support

Support services such as pole handling to ensure that work activities near our assets are completed safely.

Select →

Request outage

Request a network outage for contestable work that affects our assets e.g. line removal near poles and wires.

Select →

Over height load support

Assessment and approval for over-height activities taking place through Endeavour Energy's network area.

Select →

Substation access

Request substation or low voltage access to ensure safe connection of work on a private network or site.

Select →

Tiger tail installation or removal

Request for the installation and removal of tiger tails on low voltage power lines.

Select →

General or safety advice

Safety consultation for activities or approaches near our low voltage network.

Select →

Range of Application Sub-tiles

Endeavour Energy

# Stakeholder Engagement

Qualitative research with key customer groups captured their experiences, pain points and needs



# Key features in digitising the end-to-end (E2E) connections process

## Actions

- The new system and its **workflow is driven by actions**. Actions help **provide visibility**, tell us who is responsible for the **next step**, and encourage a **faster progression**.
- They can be **assigned to 'anyone' in the team** e.g. Pay construction fee, **or to a specific role** e.g. Submit design documents.
- Some **actions can be done in parallel** to further expediate the process.

## Payments

- Work is underway with the Finance team to **streamline payment processes**. We're considering an approach where a **'quote' is accepted**, and we **process the application**, onus on **Finance to chase payments**.
- We're considering a **new payment method: PayTo**



## Document collaboration

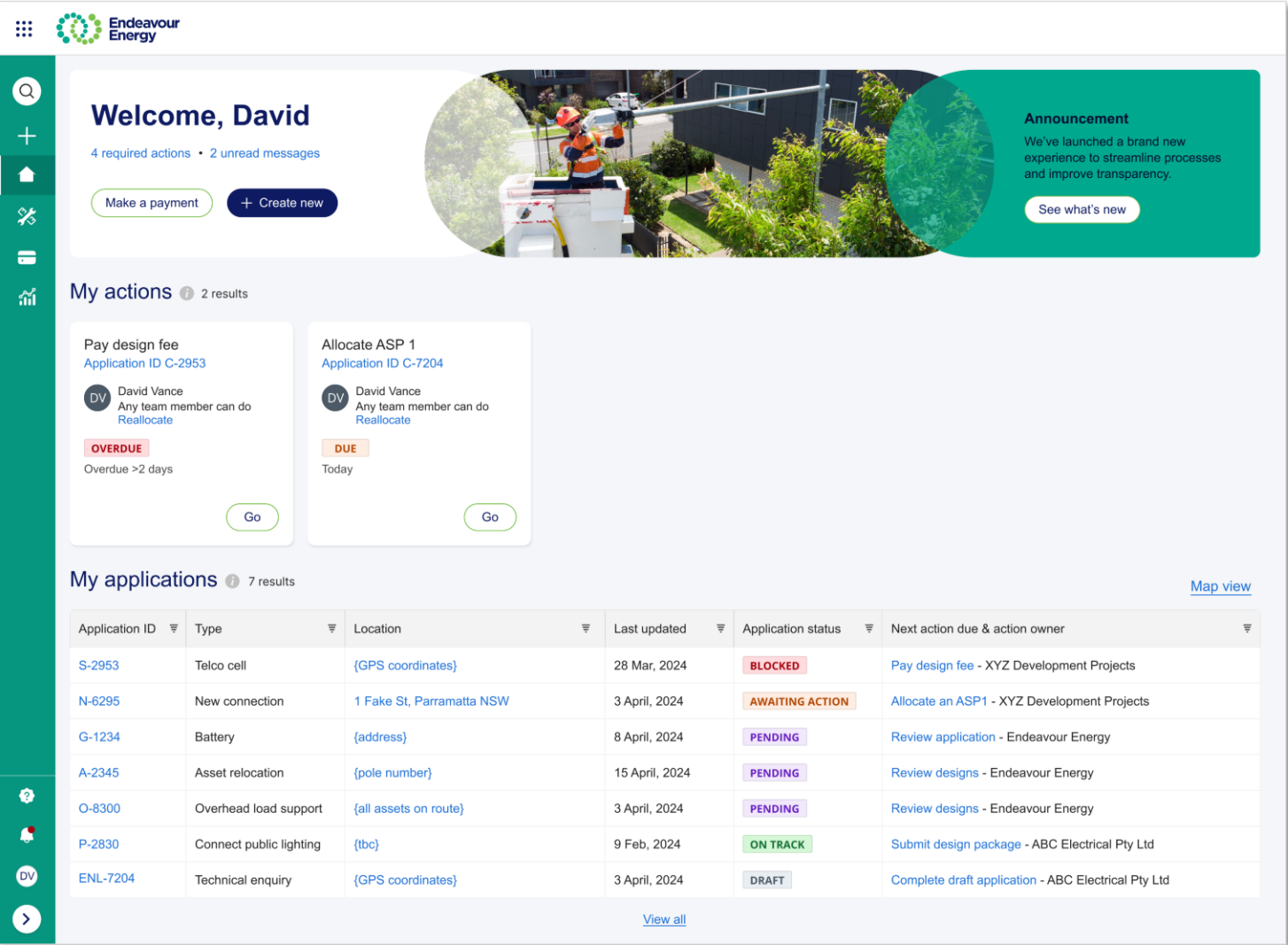
- To **reduce paper-work**, we will **digitize forms**, allow **uploading of certain documents**, and include **digital approvals** with a click of a button.
- Document **collaboration** will be enabled allowing us to **comment, draw on / mark-up, annotate, highlight** etc documents; **reducing the back-and-forth emails** with our partners.

## Messages & Communication

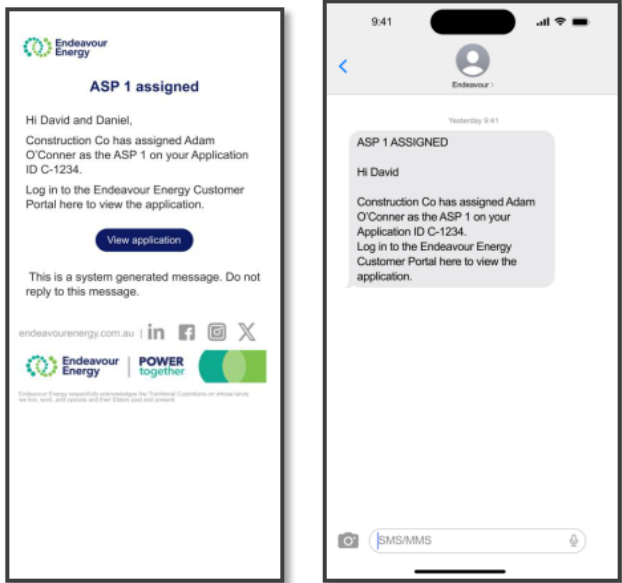
We will be able to **send private or public messages** within the application team. For example, we can chat internally before we're ready to post something publically to Developers and ASP's.

# Conceptual designs - an idea of what the solution could look like

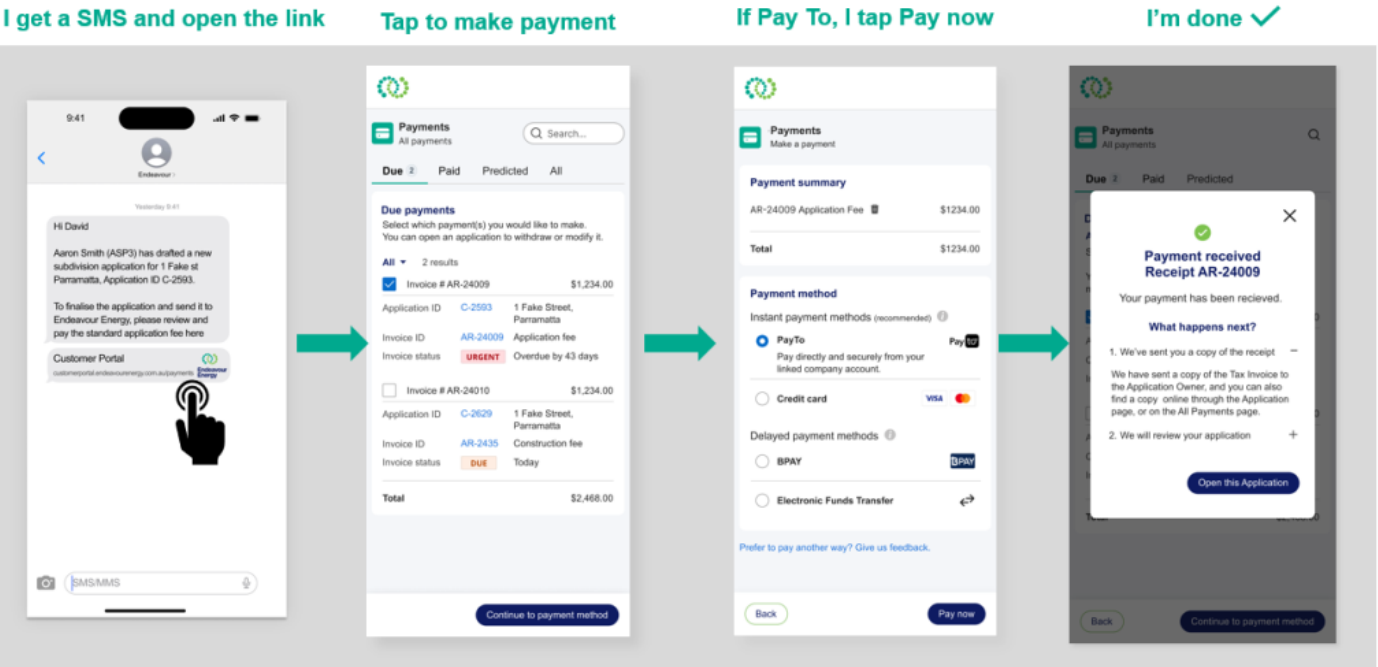
## Homepage concept



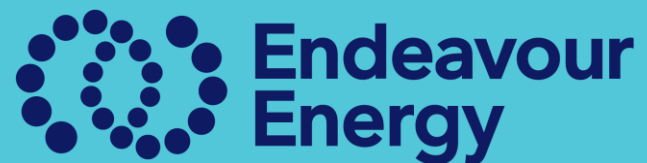
## Email and SMS notifications



## Payments concept



# Questions



# Flexible Exports & Emergency Backstop

A foundation of flexibility

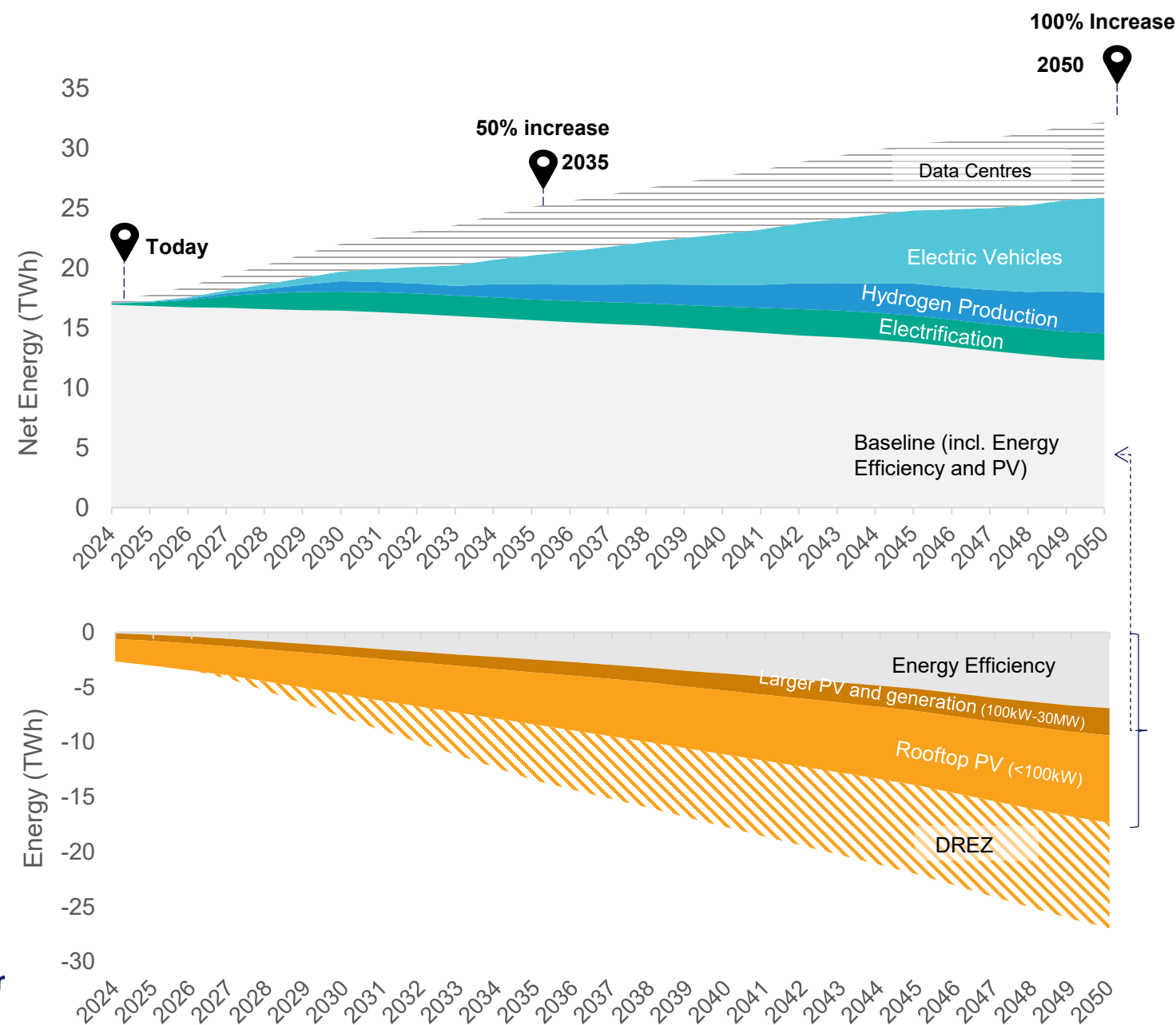
**Barton Hellyer**  
CER Innovation Manager

**POWER**  
together

Intended audience: ASP 1, 2, 3  
10:30am - 11am

# Smart integration of the grid is required to meet a doubling of demand and a fivefold increase in renewable generation over 25 years

Without flexibility, this growth in energy consumption and generation would require unprecedented and costly network augmentation

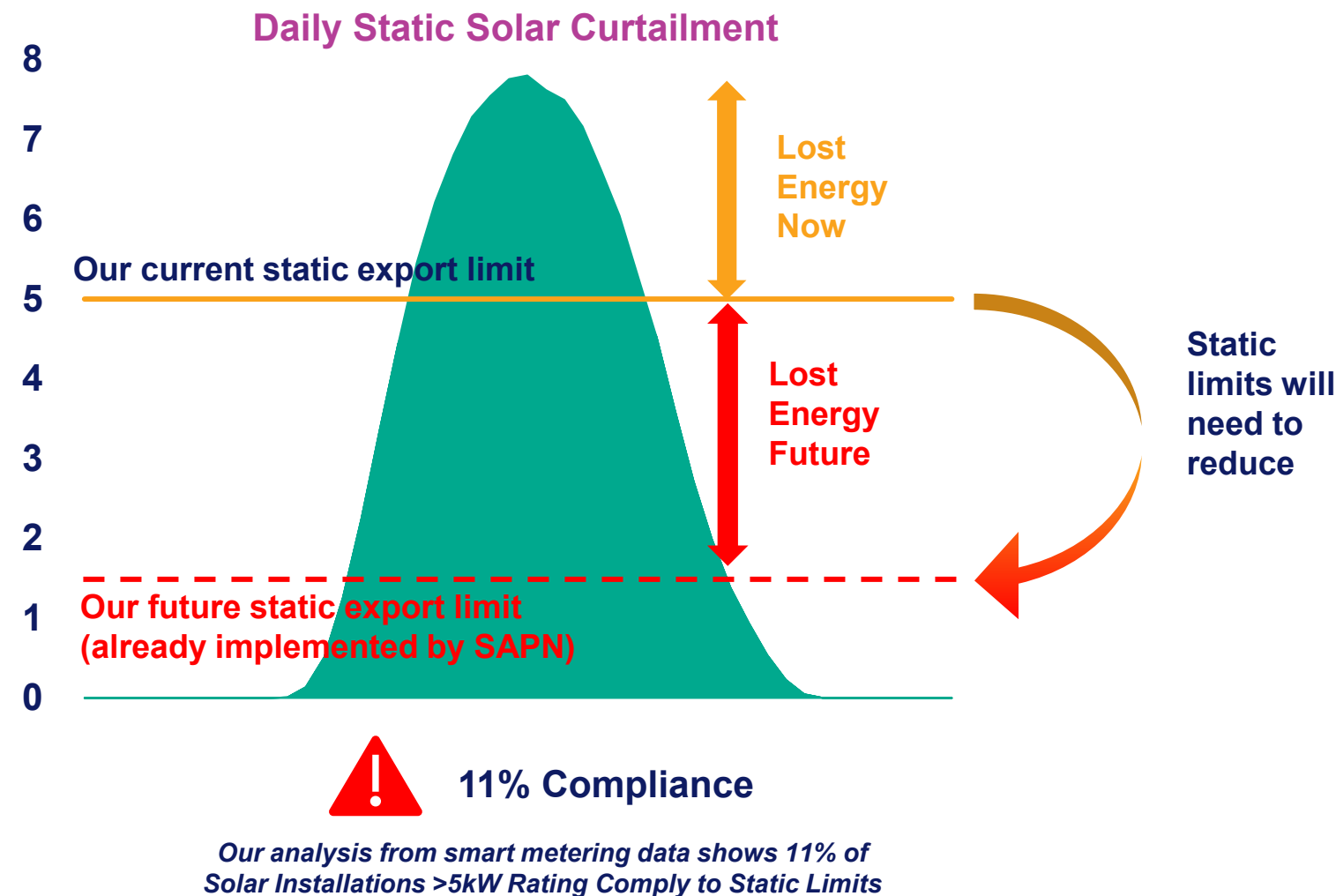
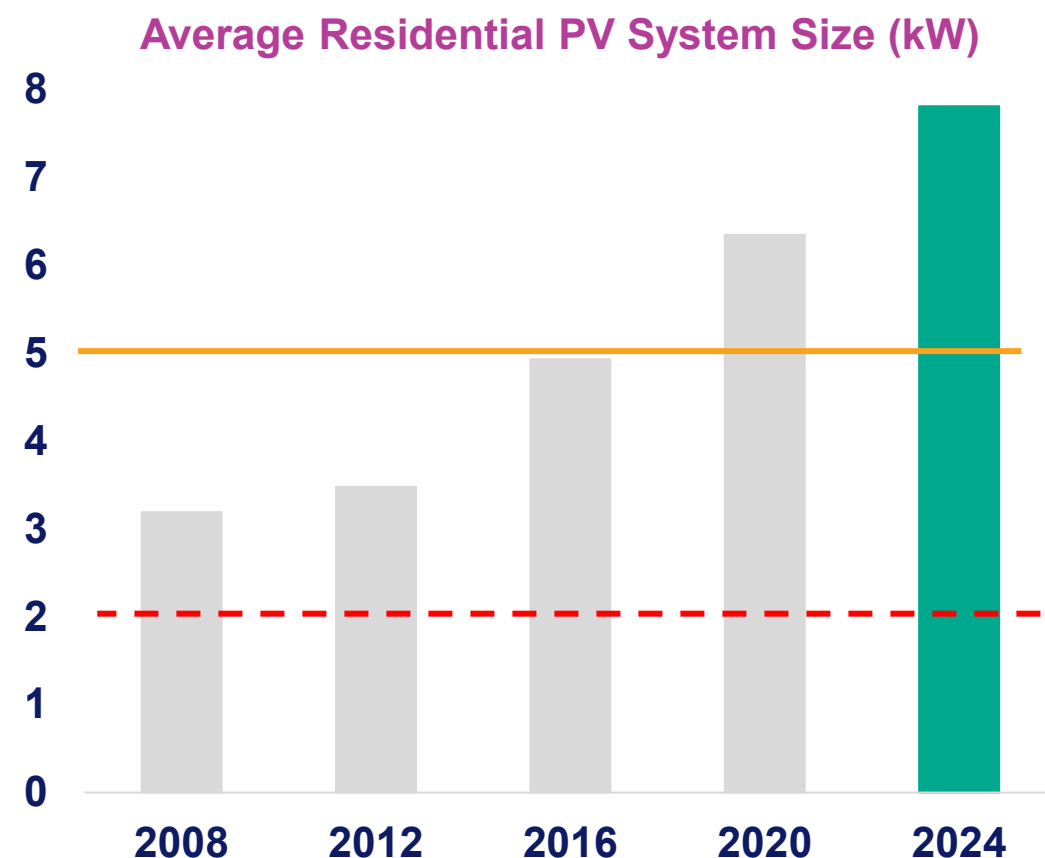


EVs are the #1 contributor to demand growth

Rooftop solar will support 25% of all energy consumption. More than 2.5GW rooftop solar is already installed on Endeavour Energy's network, increasing at 300MW annually

# Flexibility is crucial to customer equity and customer value

As solar customers rapidly increase in number and customers install larger rooftop systems, distribution networks are lowering static export limits to equitably allocate hosting capacity. Flexibility significantly increases our network's safe hosting capacity, unlocking greater value for customers from their investments in CER.



Increasing  
grid issues

Voltage Management

Reverse Flow Asset Limits

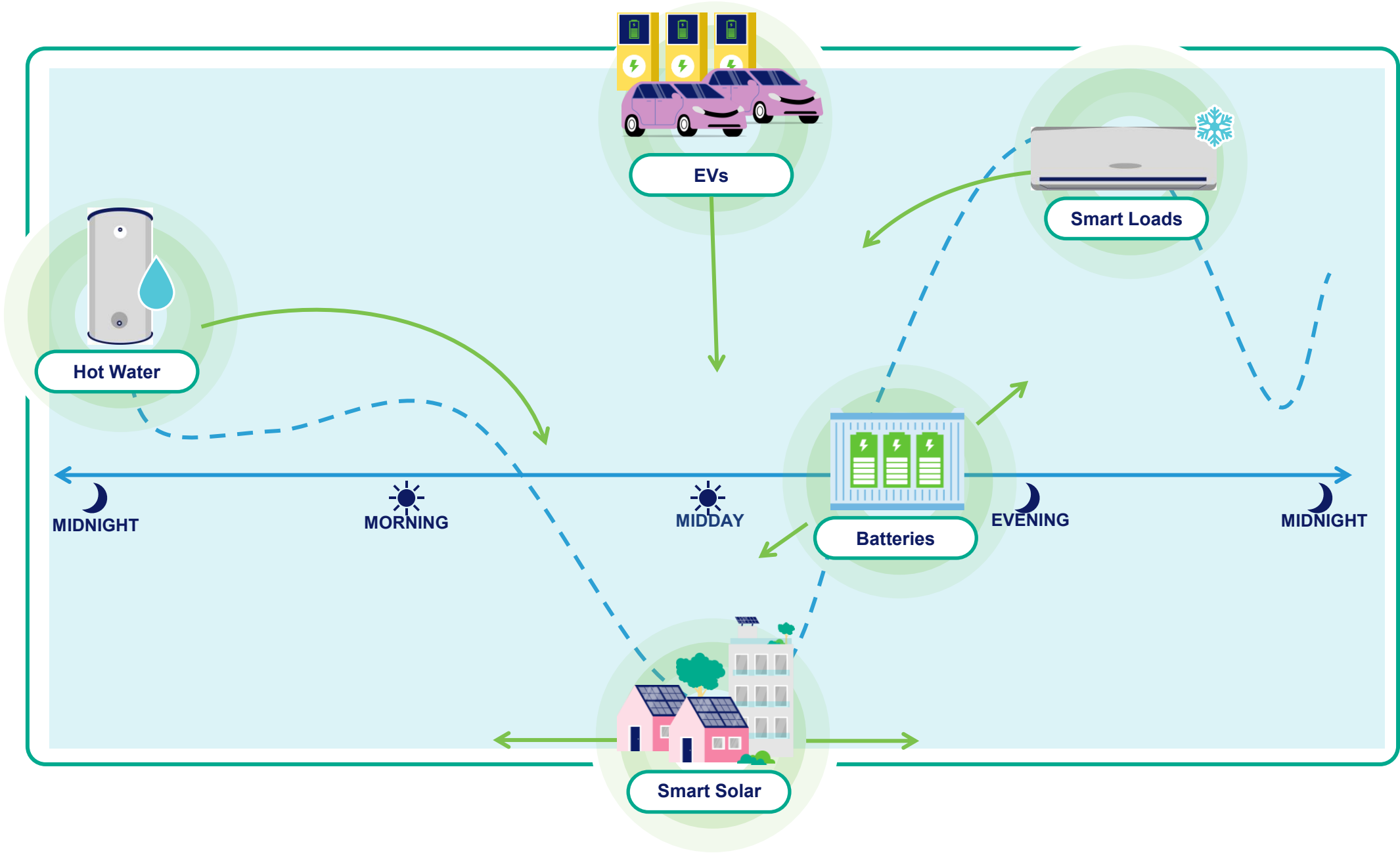
NEM System Stability

The key is  
**FLEXIBILITY**



**Energy Transition:** We need greater flexibility to ensure this growth in energy consumption and generation doesn't require double the network...

50+ years ago  
we introduced  
controlled load  
hot water...



...now we need to connect solar in a smarter way.... “Flexible Exports”

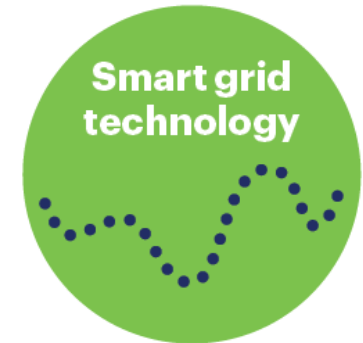
**Flexible Exports** allows our customers to double the exports from their solar without destabilising the grid or causing local power quality or reliability issues.



Your solar system's smart inverter

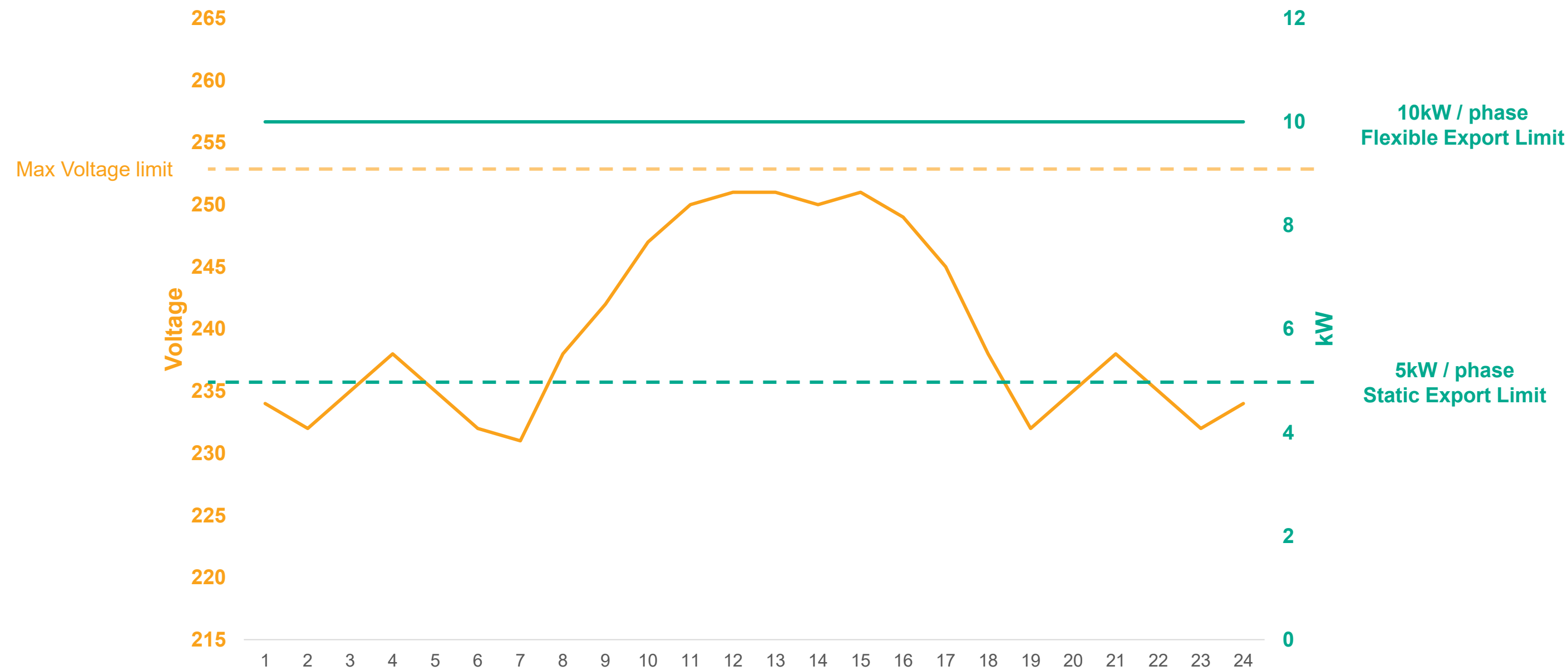


...communicates with the local grid via the internet, via secure servers...



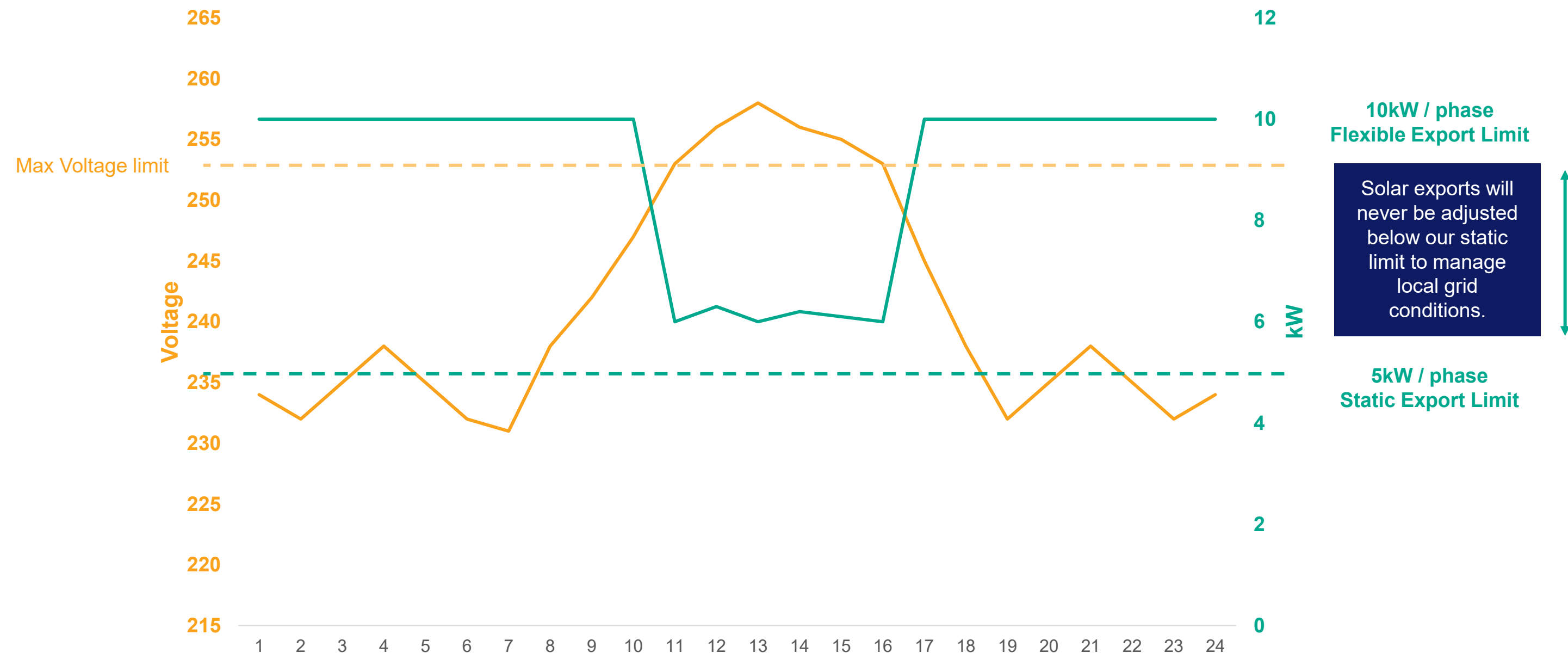
...increasing and decreasing exporting capacity in real time, based on local grid demand.

# What does it look like when a flexible export limit is applied?



The scenario above shows stable voltage conditions. When the local grid is stable, solar customers with Flexible Exports can export up to the flexible limit of 10kW almost all the time (95%).

# What does it look like when a flexible export limit is applied?



The scenario above shows destabilised local voltage. Endeavour Energy remotely adjusts solar exports down only when these conditions arise to maintain a stable and reliable local supply.

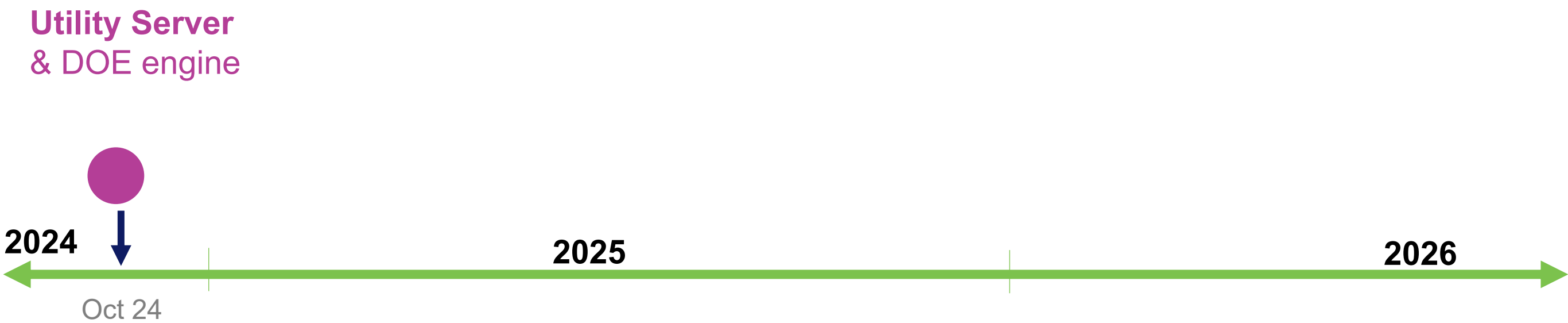
**We need to rethink the way we connect customers**

**We need to transform the way we manage solar**

**This is bigger than just Endeavour, it's a NSW and National problem**

**This will require large scale coordination to make it happen**

# What we have achieved so far

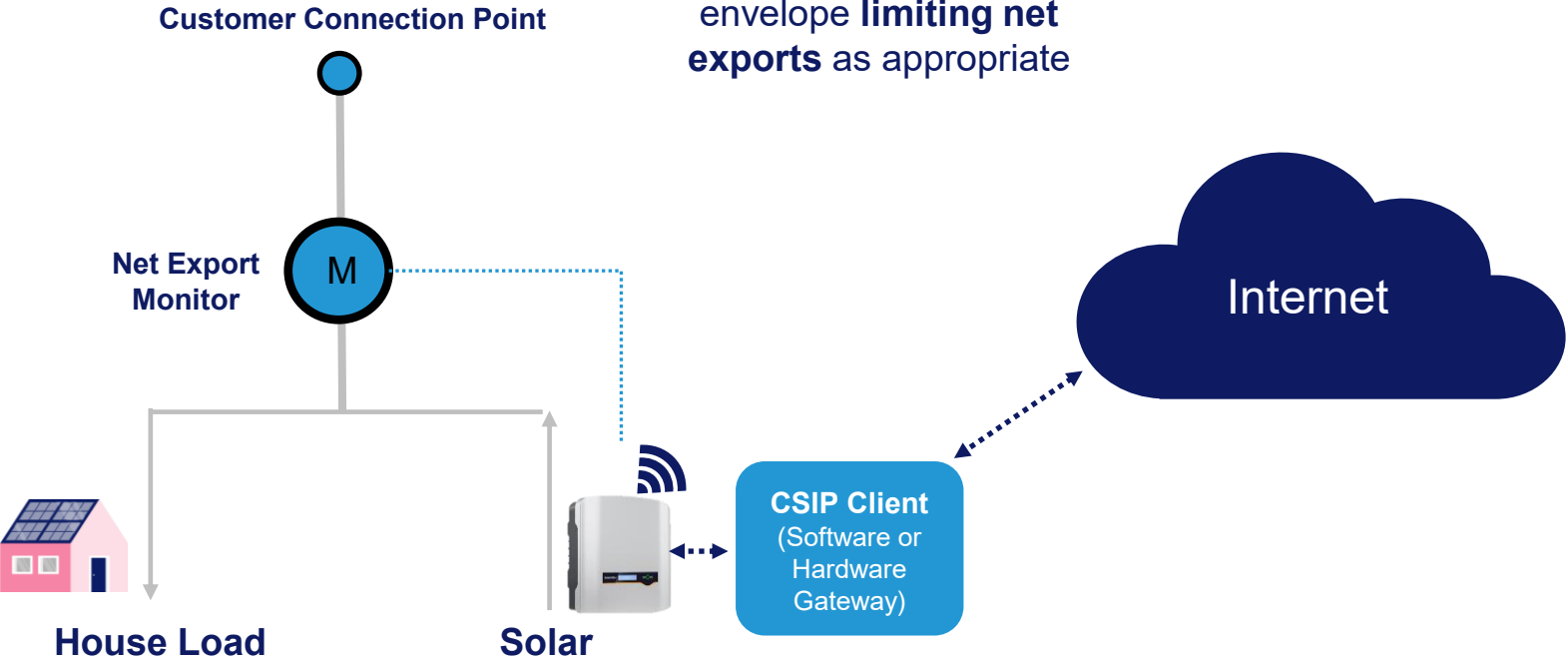


# Flexible Exports – a closer look at how it works

Choosing Flexible Exports does not affect how, when, or how much solar energy a customer can consume to power their home or business. **It only impacts exports to the grid at the point of connection.**

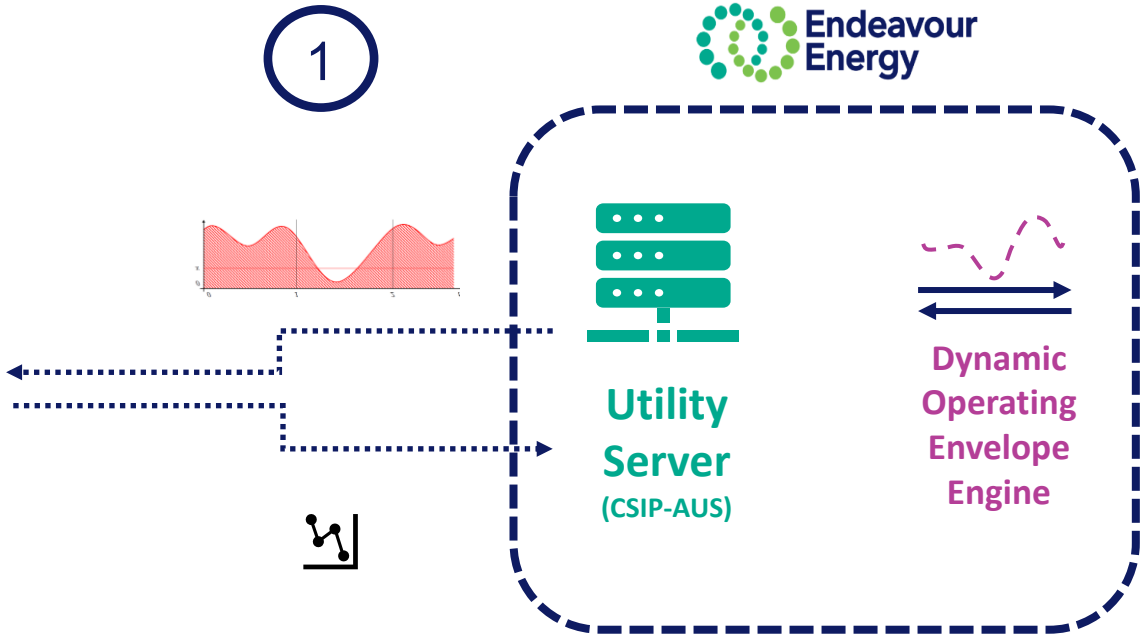
2

The customer's system receives and responds to the operating envelope **limiting net exports** as appropriate



Endeavour Energy's system calculates **dynamic operating envelopes** and communicates this to the customer's inverter via a **Utility Server**

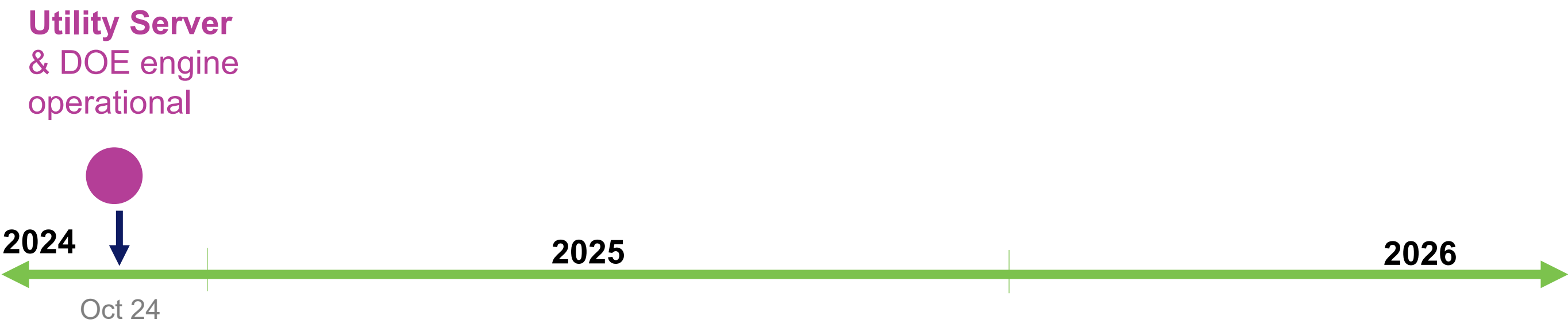
1



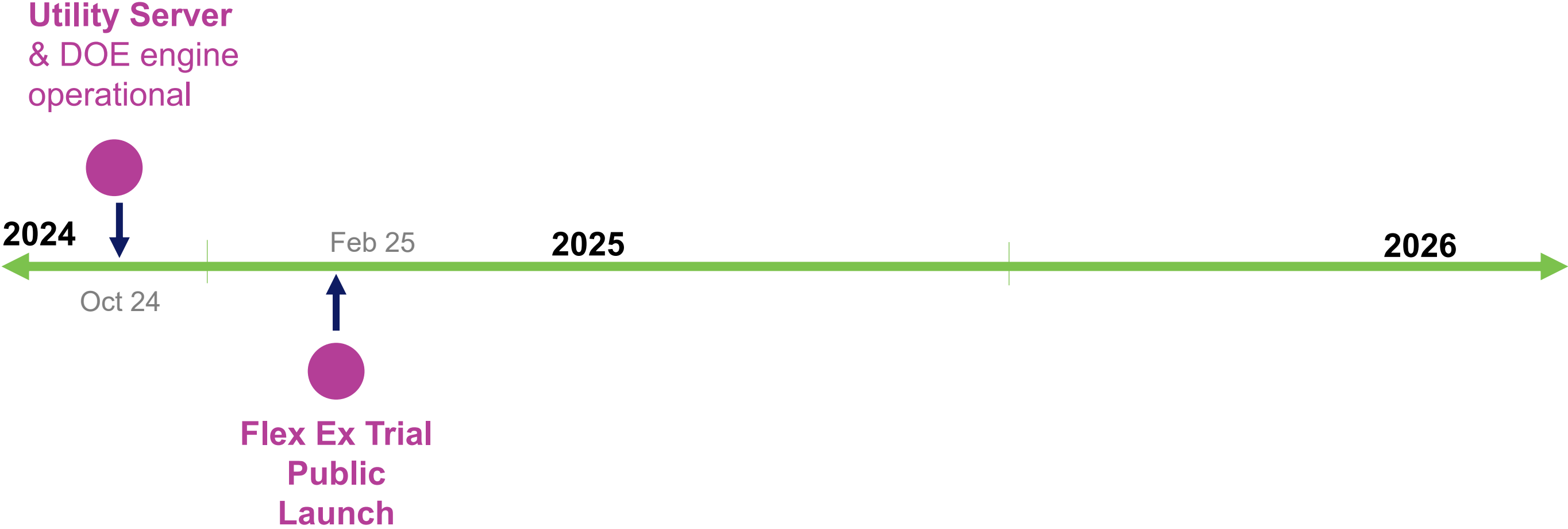
3

Endeavour Energy's Utility Server receives the **latest telemetry** from the customers site/inverter.

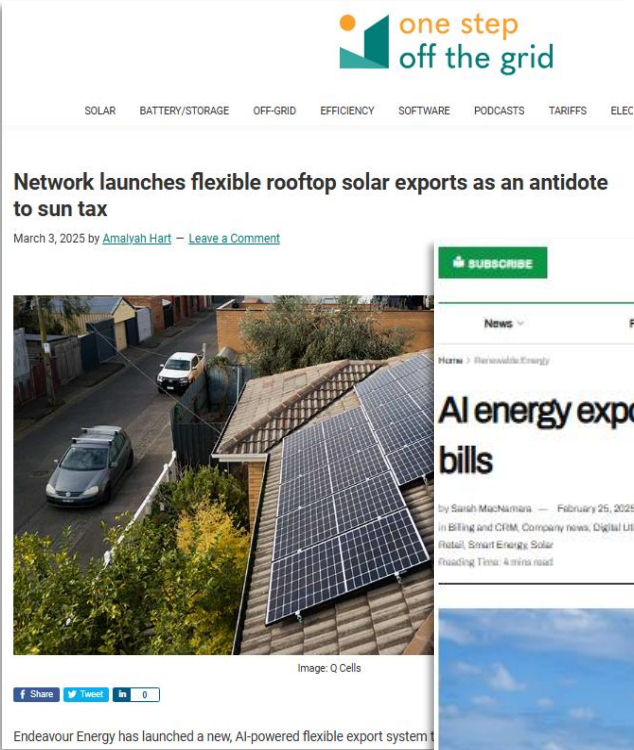
# What we have achieved so far



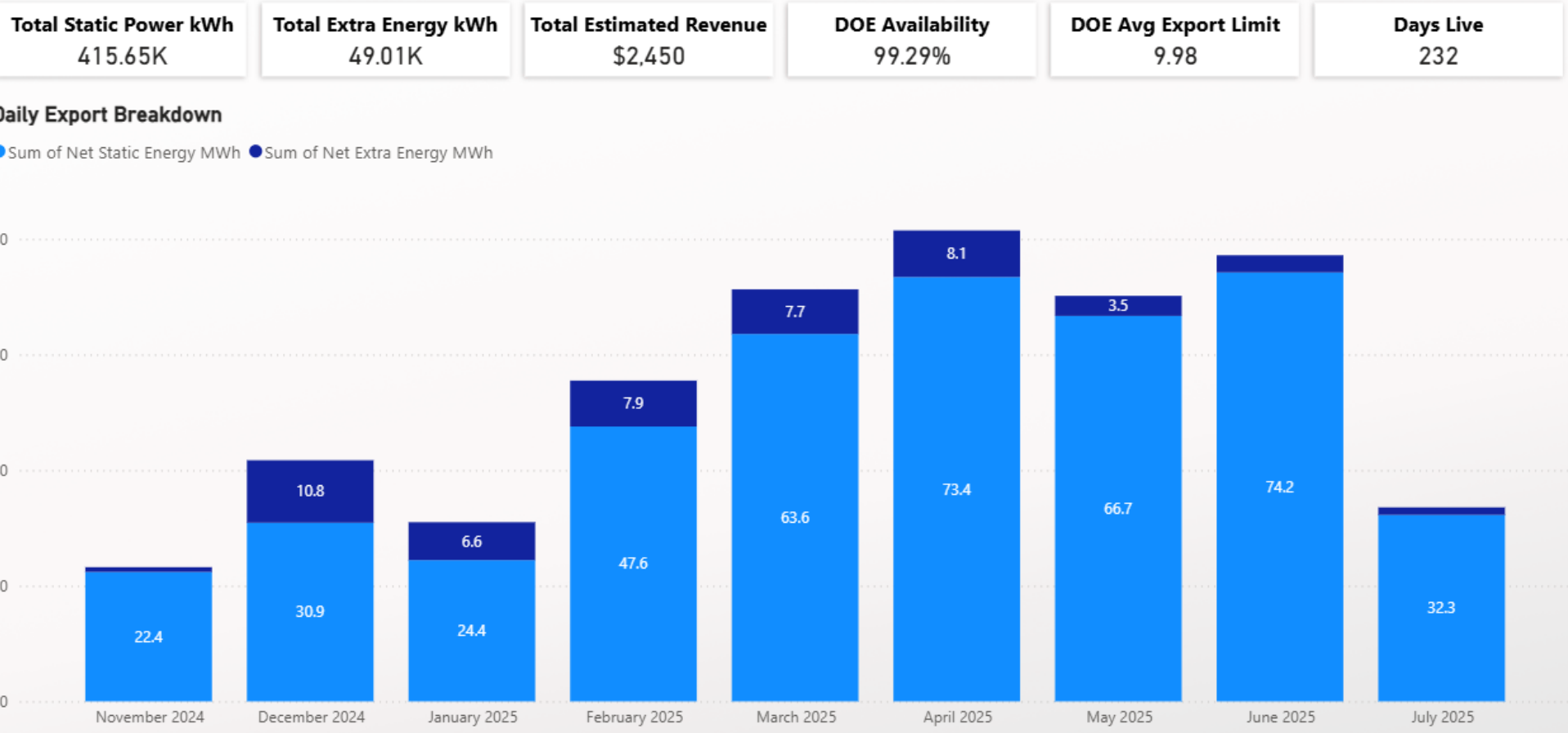
# What we have achieved so far



# Flexible Exports Trial




# Our Flexible Exports Trial is delivering on our promise to participating customers



## Flexible Exports Trial


More solar • More savings • A smarter and more sustainable grid



### The Flexible Exports Trial is a partnership between solar customers and Endeavour Energy

With Flexible Exports, solar customers allow Endeavour Energy to communicate securely over the internet with their smart solar inverter, and remotely adjust their solar exports down **only when needed** to stabilise the local grid.

Solar customers who choose Flexible Exports can export up to 10kW of excess solar, double the current fixed limit of 5kW.



**Benefits of the Trial**

- Access a flexible export limit of 10kW (double the fixed limit)
- Save on your household energy costs
- Support a sustainable energy future and reliable network services for all

Register your interest to participate!

[www.endeavourenergy.com.au/modern-grid/flexible-exports/consumer-trial](http://www.endeavourenergy.com.au/modern-grid/flexible-exports/consumer-trial)

To support our customers' sustainable energy future, we are acting now to make our grid smarter and more flexible.

A smarter grid can safely host a lot more solar energy, helping you get the most of your investment in solar, and driving a sustainable energy future for everyone.

There is a hurdle we are working to overcome. The grid was not originally designed to receive large amounts of solar energy feeding into it.

When it is not consumed, this excess solar can overload the grid causing local outages.

To keep your power supply stable and reliable, we have traditionally limited the amount of excess solar energy that customers can feed back into the grid at all times.

It's time for a new approach that increases solar on the grid and benefits everyone.

### Customers with an eligible smart solar inverter can save

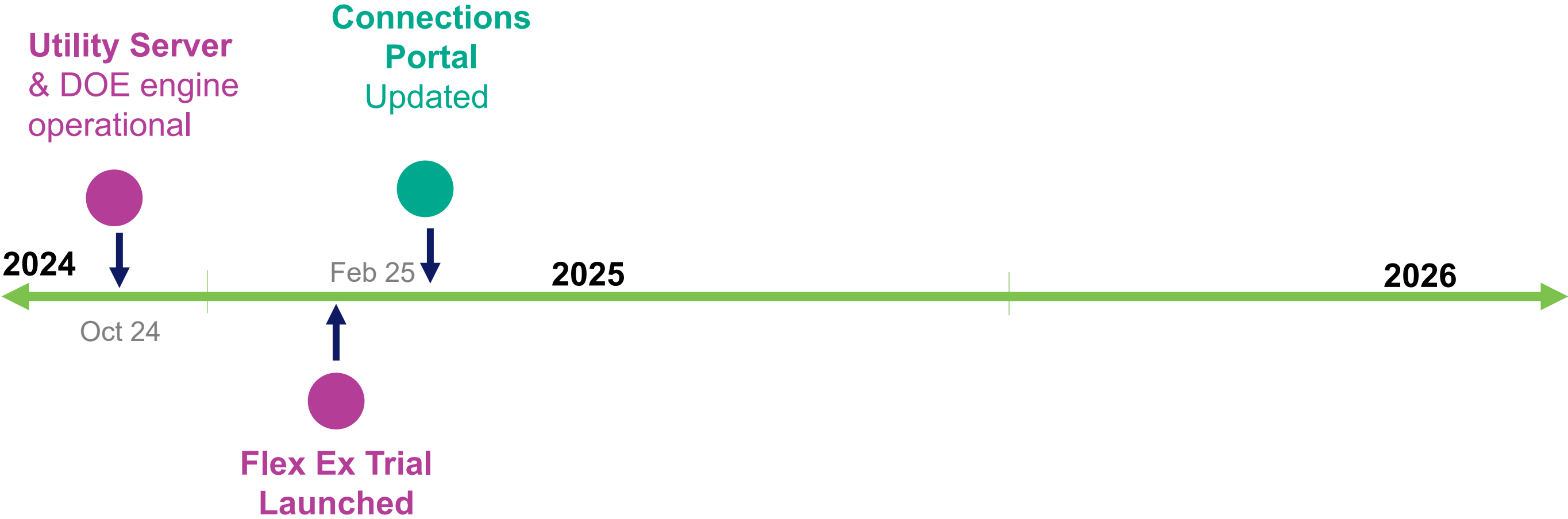
<b>\$40-\$60/year</b> with a rated power output of 8kW	<b>\$100-\$200/year</b> with a rated power output of 10kW
---	--

**Endeavour Energy**


**POWER together**

[endeavourenergy.com.au](http://endeavourenergy.com.au)

# What we have achieved so far





	Type *	Manufacturer *	Model *	Quantity *	Capacity	
AC Connection	PV Inverter	Ross new test company	MD5000	1	4.56kVA	Uninstalled 
Device	PV Panel	Ningbo Ulica Solar Co Ltd	UL-505M-132HV	20	10.20kW	Uninstalled











Your changes related to uninstall will be lost if you navigate back to the previous screen.

## New Equipment



Please add any new equipment (AC Connections and Devices) in this section.

	Type *	Manufacturer *	Model *	Quantity *	Capacity *	
AC Connection	PV Inverter 	Sungrow Power Supply C 	SG10RT (AS4777-2 2) 	1	10.00kVA	
Device	PV Panel 	Jinko Solar Co Ltd 	JKM415N-54HL4-V 	25	10.50kW	

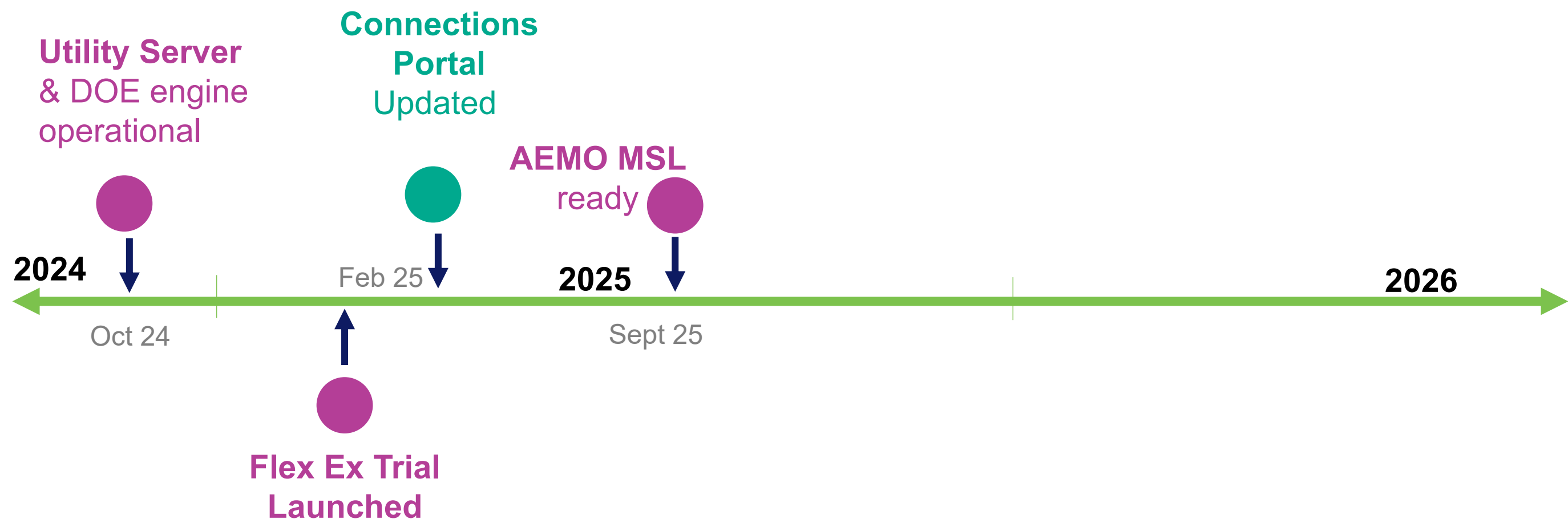
+ Add New Device

+ Add New Connection



Your application will be auto approved and Permission to Connect will be issued after application is submitted.

# What is coming



# Procedure summary

## Demand forecast < MSL2: Actions to clear MSL2 condition:

- Market notice if actions are taken
- Recall planned outages that reduce VIC export capability
- Constrain significant non-scheduled generation 0 MW
- Constrain scheduled/semi-scheduled units to 0 MW if not required
- Move to smaller unit combination in SA

## Demand forecast < MSL1:

- Market notice
- Liaise with AusNet and ElectraNet

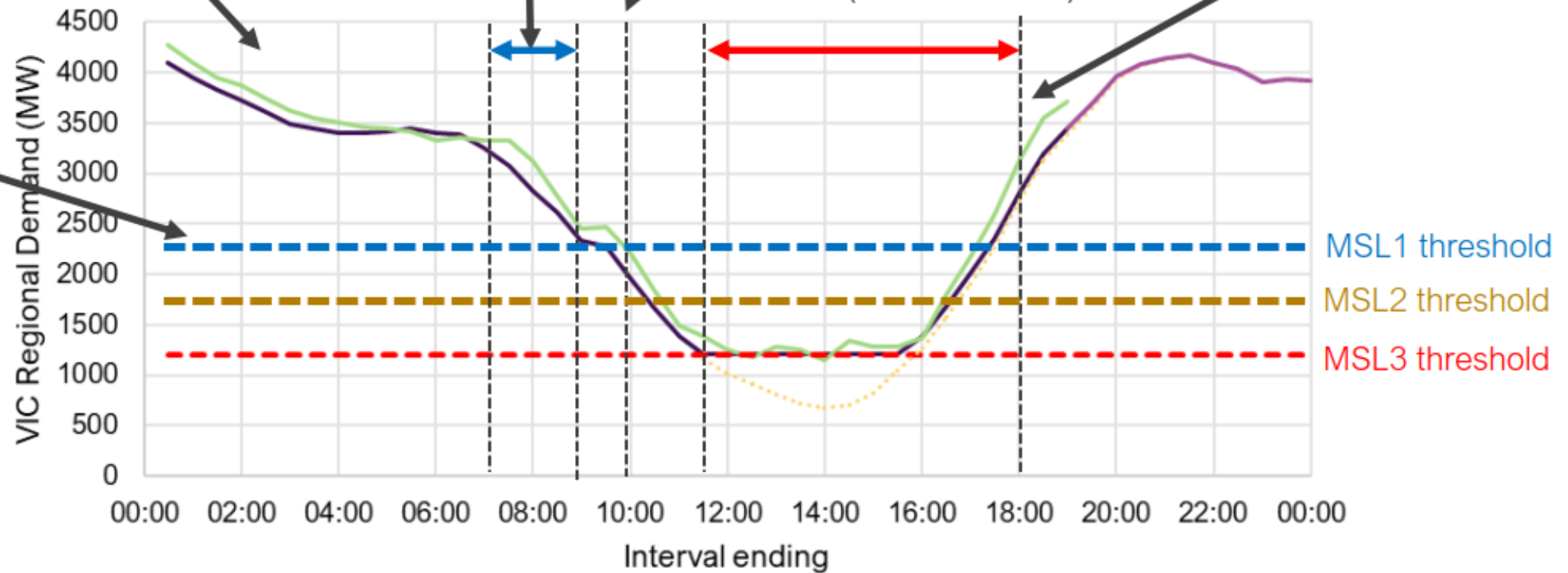
0700-0900 (forecast demand < MSL2): BESS to discharge  
0900-1300: BESS held in reserve at minimum state of charge

## 90 mins before MSL3 condition forecast:

Instruction to NSPs to maintain demand above MSL3 threshold. Market Notice.

**Demand < MSL3:** NSP actions to maintain demand above MSL3 threshold (best endeavours)

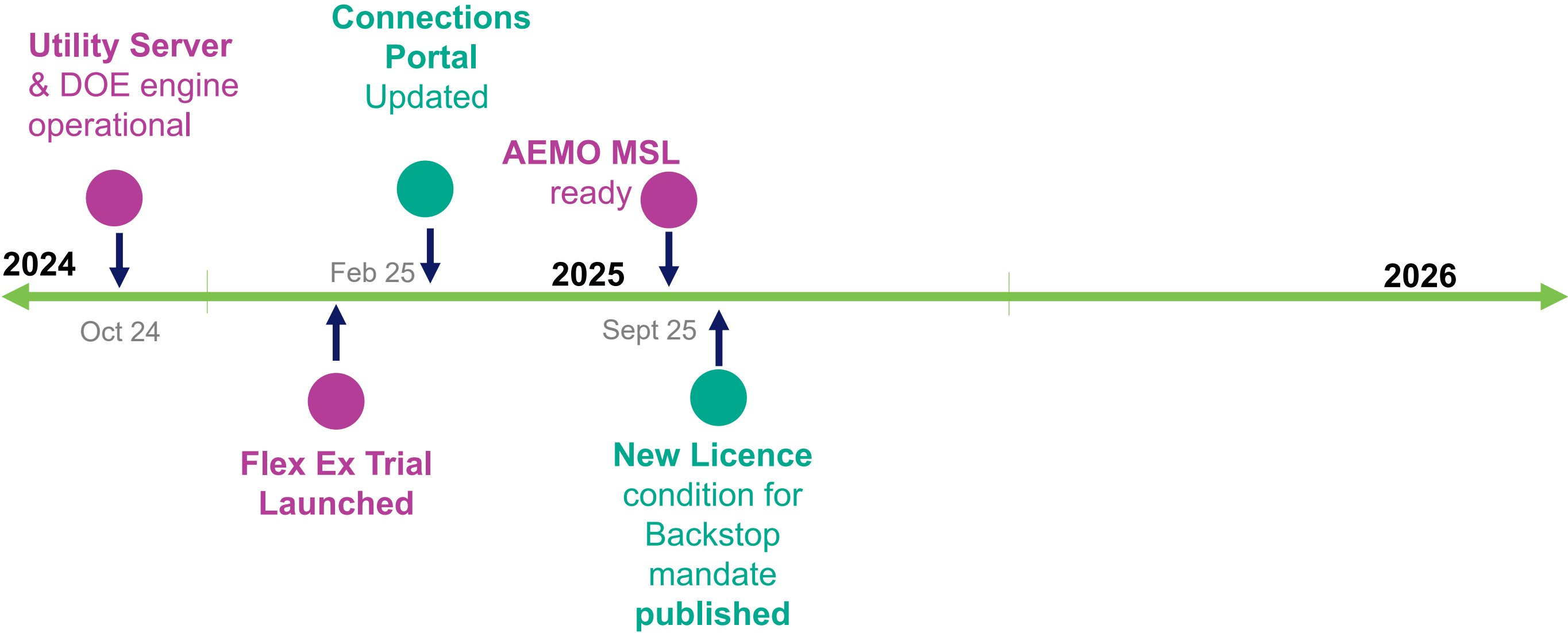
MSL condition cancelled



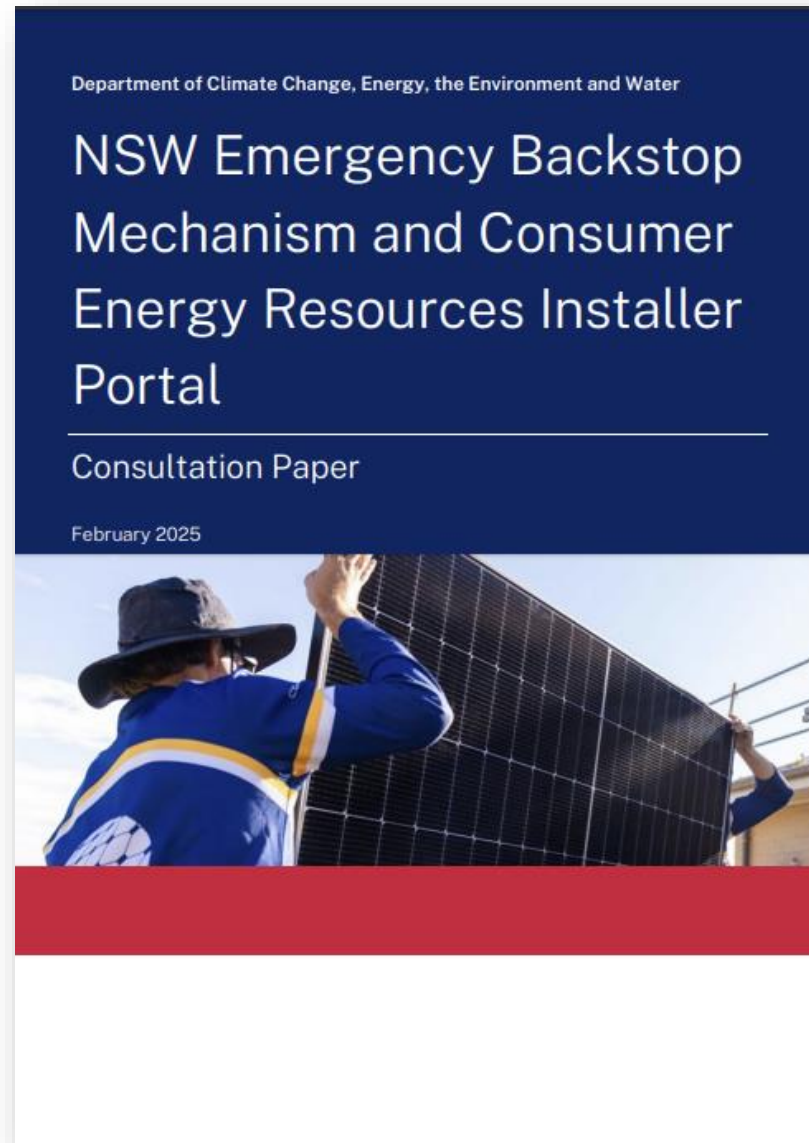
— VIC Forecast demand (latest forecast) — VIC Actual demand  
 - - - MSL3 threshold ..... VIC Forecast demand (1130hrs run)  
 — VIC Forecast demand (1900 run)



# What is coming



# New License Condition Coming Soon



## Solar curtailment for backstop

*Mandates capability to remotely interrupt or curtail exports and generation for all new or replacement solar inverter systems from 30 June 2026.*

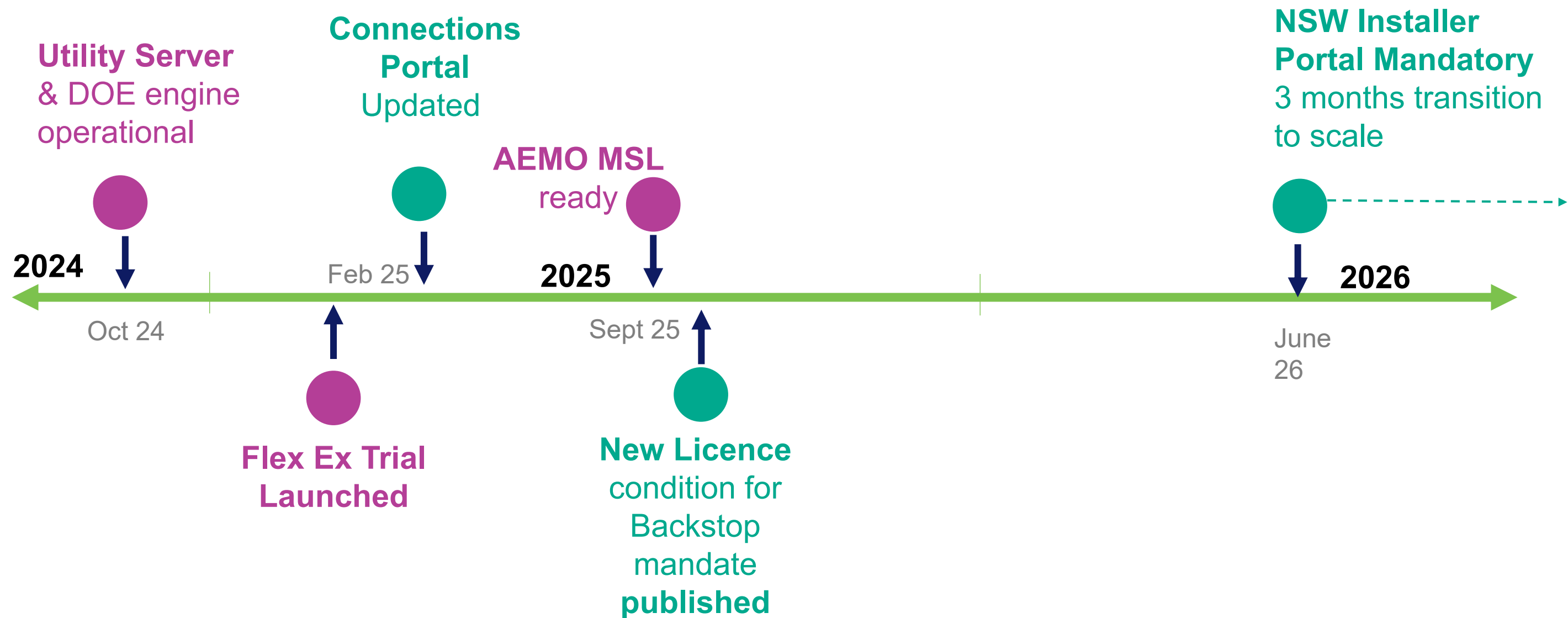
## Common NSW Installer portal

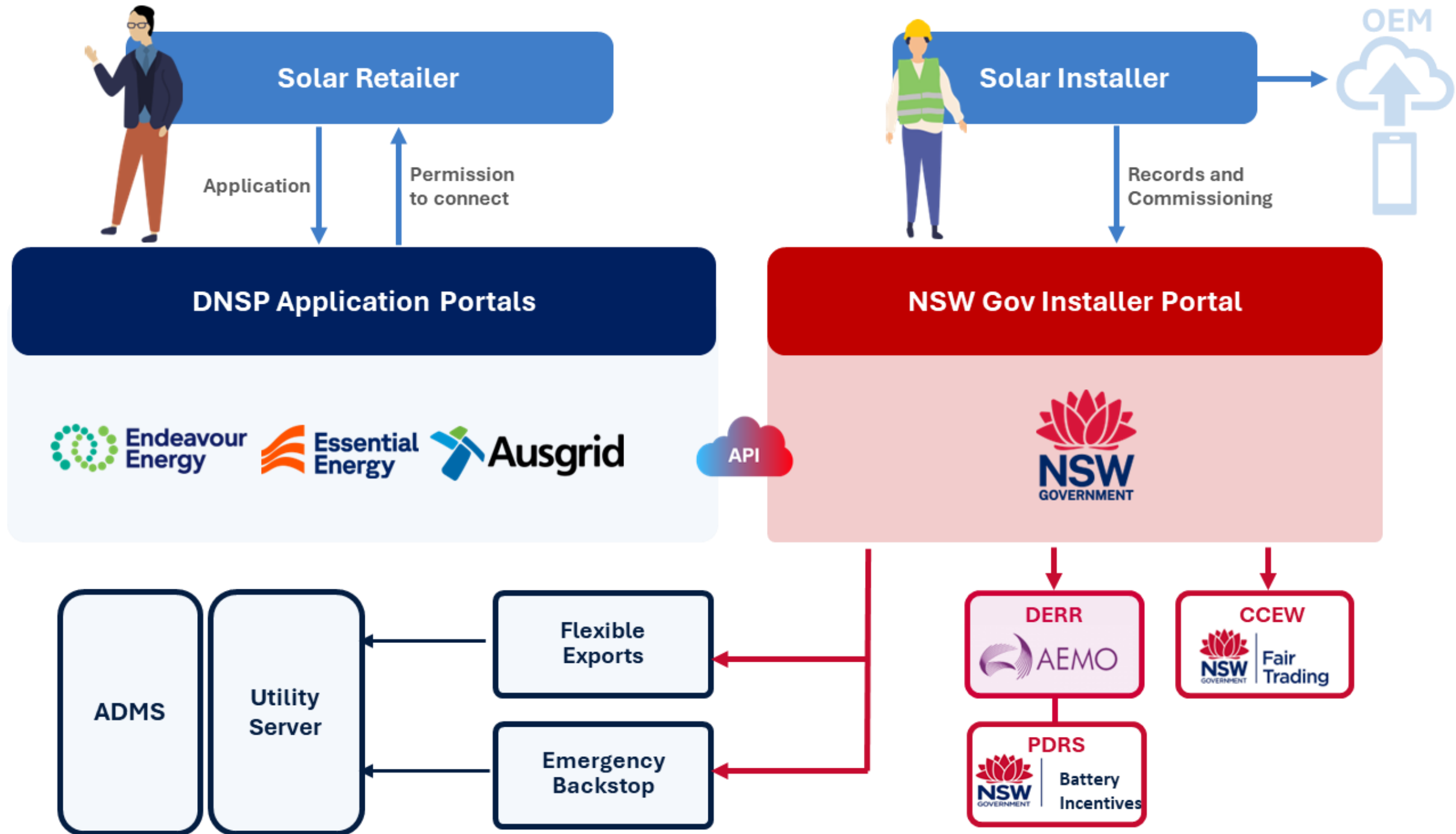
*Requirement to integrate the NSW government installer portal into our processes*

## Customer protections and compliance

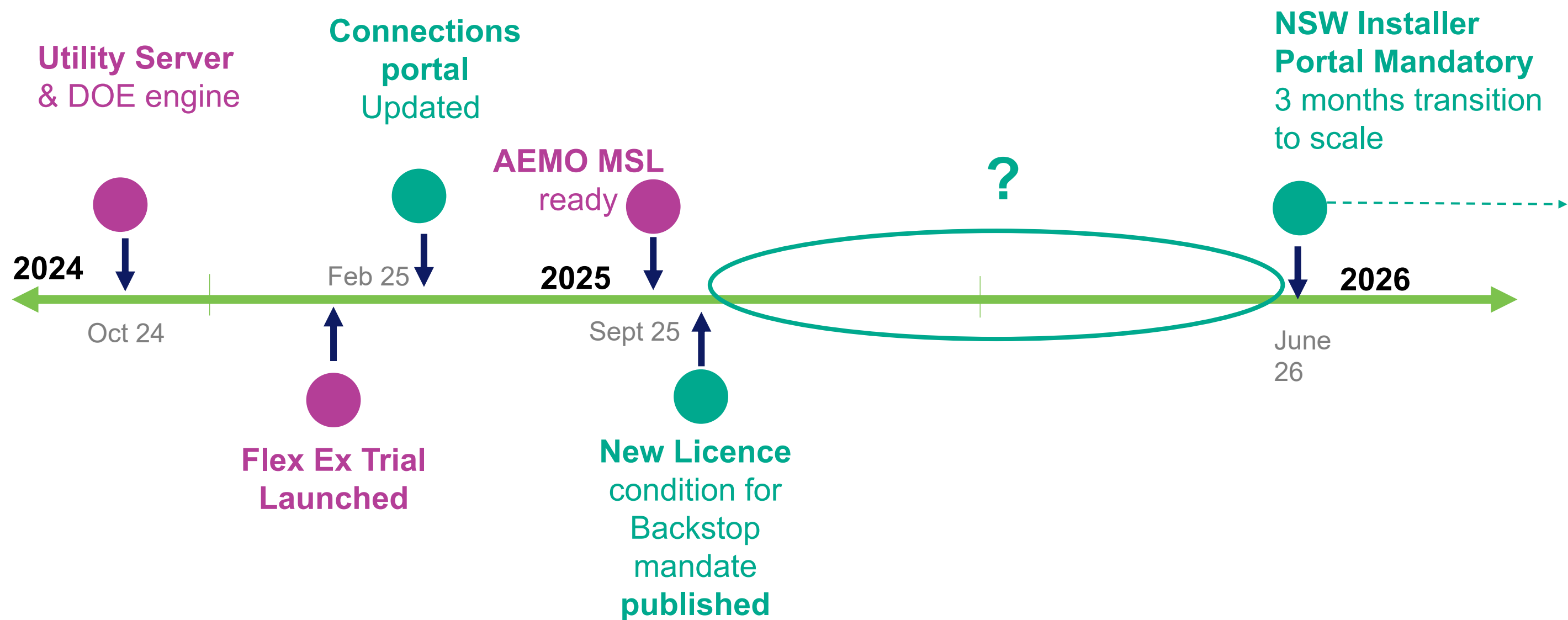
*Updates will be required to our agreements and notification procedures to customers*

# What is coming

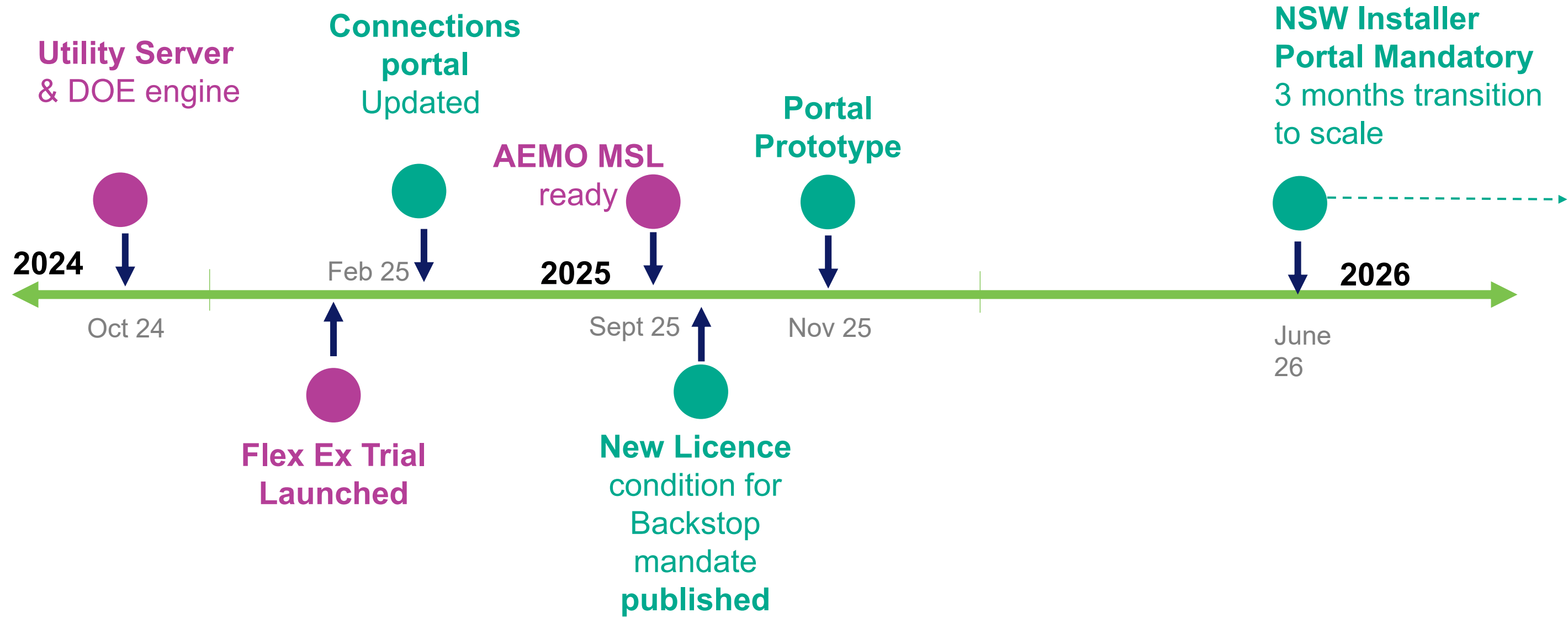




# What is coming



# What is coming



Solar Portal

Profile Report (1/2/2025)

Can records show that there is no working equipment currently on site

New Equipment

Hybrid Inverter

Manufacturer

Sungrow Power Supply Co Ltd

Model

SH10RS (AS4777 2 2020)

Quantity

1

Capacity

10.00kW

Serial Number \*

123456789

☒ I have applied the AS/NZS 4777.2:2020 (Region A) / PD15000 technical standard

Technical Settings For Inverters

Commissioning Date \*

13-May-2025

PV Panel

Manufacturer

Jinko Solar Co Ltd

Model

JKM442N-54HL4R-V (EG 61215-2021)

Quantity

30

Capacity

13.20kW

Commissioning Date \*

13-May-2025

Battery

Manufacturer

Sungrow Power Supply Co Ltd

Model

SDR162

01

02

03

01

02

03

01

02

03

01

02

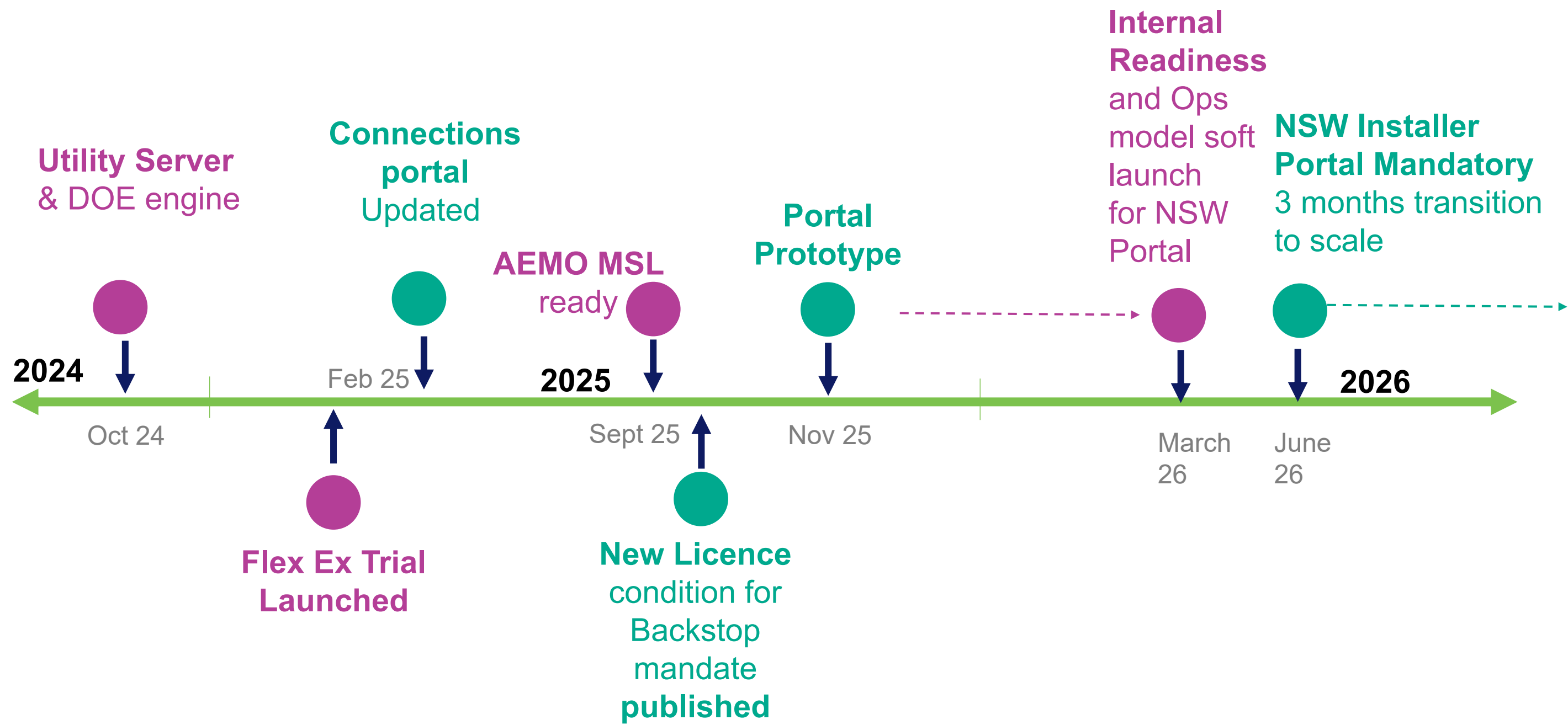
03

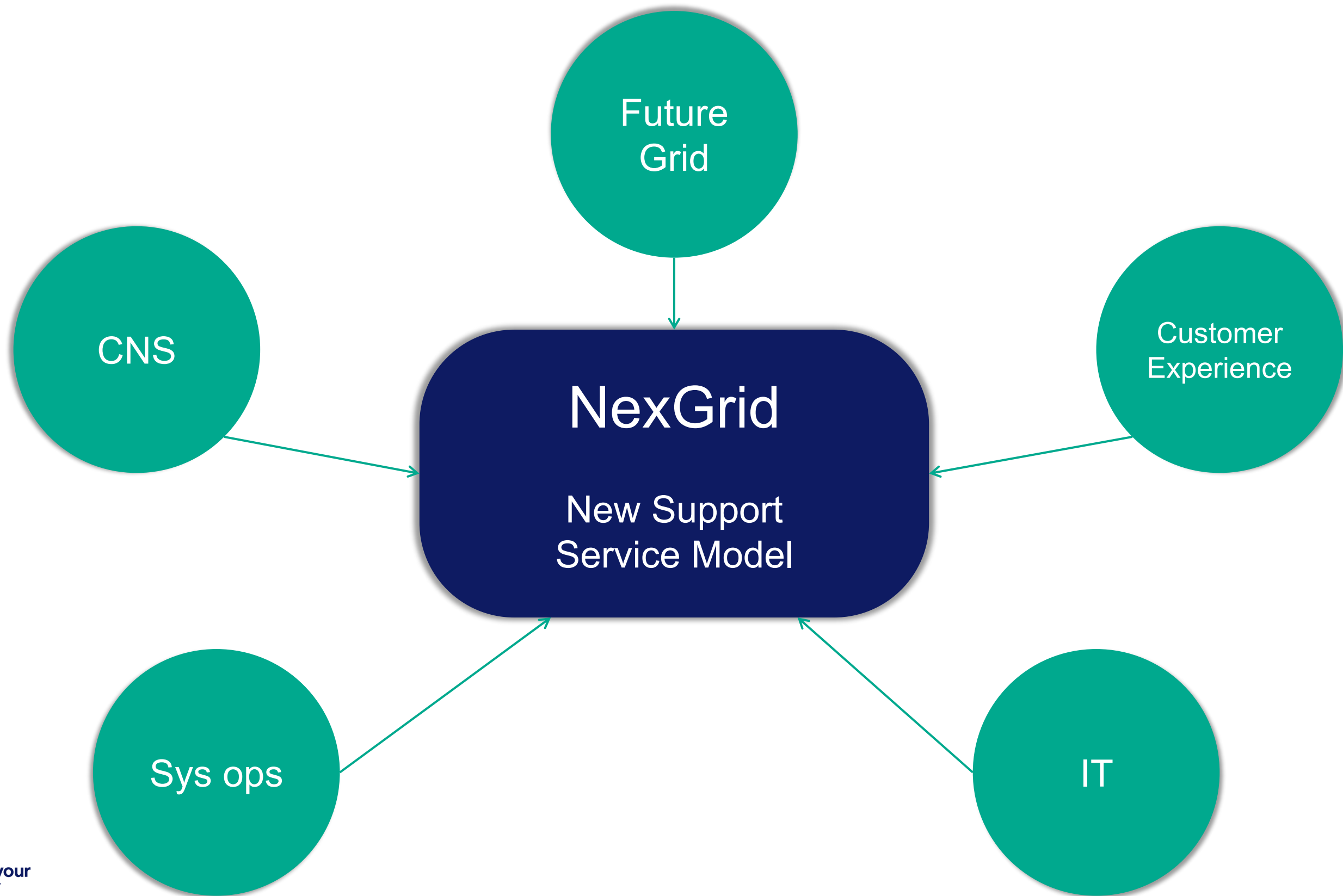
01

02

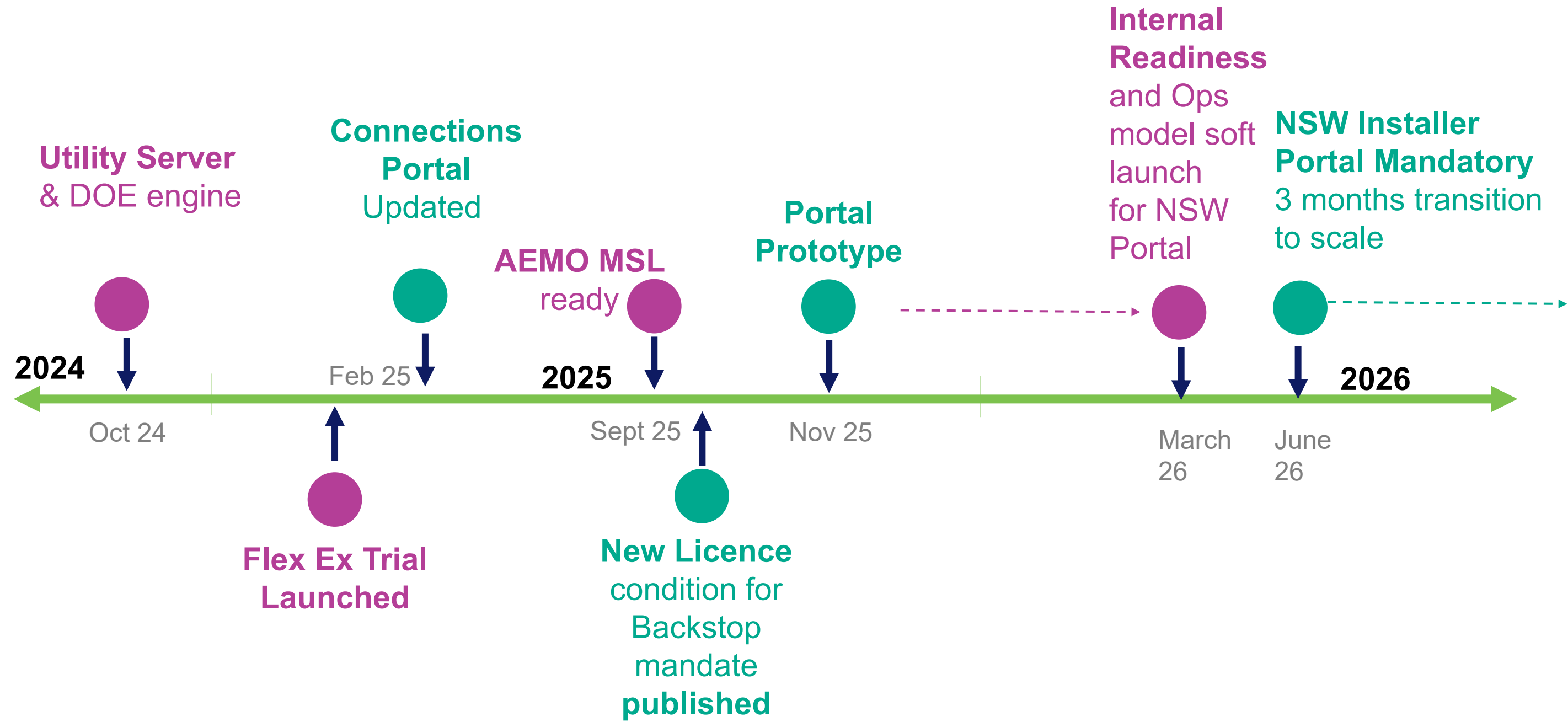
03

# What is coming





# What is coming



# Questions

# ASP Scheme Review

**Markus Meier-Linder**  
Manager, ASP Scheme



## The ASP Assessment Team

- Vanessa Frazer, Team Leader
- Michelle Wheatley, Assessment Officer
- Rochelle Ziino, Assessment Officer
- Roisin O'Leary, Assessment Officer
- Rabeya Sharna, Assessment Officer



## The ASP Review Project Team

- Markus Meier-Lindner, Manager
  - Mario Sousa, Senior Technical Advisor
  - Michael Brull, Senior Policy Officer
  - Laura Chung, Senior Project Officer
  - Wazhma O’Nassiry, Assistant Project Officer
- 
- Both teams merged into one since 1 July 2025



## 34 recommendations - what do they cover?

- Regulatory changes, e.g., to the Scheme Rules
- Training & safety requirements
- Updating of classes within accreditation levels
- Implementation of an online platform
- Improved information sharing across key stakeholders
- Improved communications across the sector
- Improved processes utilising current and contemporary technology and practices



## What are we up to?

### Completed

- Rec 1 - Energy Scheme Administration at DCCEEW/ECCS
- Rec 3 - NSW Government Funding for Modernising the Scheme Administration Platform
- Rec 4 - Share a unique identifier to speed up employee registrations
- Rec 32 - Establishment of an Advisory Body
- Rec 24 - Enhancing Coordination of Regulatory Activities with the NSW Building Commission and SafeWork



## What are we up to?

### Completed continued

- Rec 30 - Establishing a 4-Year Review Cycle & Rec 31 - schedule reviews of training requirements (NB: These items will be addressed through a transition into a cycle of continuous improvement rather than longer periodical reviews)
- Rec 34 - Introduce regular reporting (NB: regular reporting is already conducted internally, this item is more about finetuning and better communication/sharing with external stakeholders)

# What are we up to?

## In Progress

- Rec 2 - Enhancing Administration Platform
- Rec 6 - Regular Communications for Scheme Participants
- Rec 10 - Implementing Continued Access to Competent Principals for ASPs
- Rec 11 - Efficient Procedure for Associating Registered Employees (RAs) with a Company
- Rec 18 - Enhancing Database for DNSPs to Access Employee Information
- Various Recommendations to address regulatory changes including updating the Scheme Rules





## The ASP Scheme Advisory Committee

- Set up permanently for the ASP Scheme
- Has 12 members representing all key stakeholder groups
- Plays a pivotal role through providing expert industry advice and guidance
- Supports a transition into a cycle of continuous improvement once the Review Project is completed
- Has met 3 times



## Working Groups

Working Groups under the ASP Scheme Advisory Committee:

- Sub-Transmission & L3 Qualifications
- Tiger Tails
- Metering
- Vegetation Management
- Asset Relocation



## Future ASP Online Platform

Platform is now under development

- Development and testing is planned to be completed before Christmas
- We will be seeking volunteers of all levels and areas of the sector to help with testing
- “Soft” go-live and onboarding planned from early 2026

# Questions

# Standards updates

**Amali Wickramasinghe**  
Lead Engineer - Mains

# Agenda

## Standards update/Process of issuing a change management pack for major standard updates

- MCI0010                      MCI0003                      ETS0052
- MDI0028                      MCI0004                      ETS 00103
- MDI0051                      SDI182
- MCI0006                      SDI223

## New Equipment Introduction

- Community Batteries/ LVSTAT com/EV charges/EFDs- Awareness
- Multifunction Poles/New cable types/conductors/ Non SF6 switchgear/XGuard Conduits – New Trials

## Opportunities for Improvement

- Clarifications and Question Time

# Key Highlights – MCI0010 Underground Transmission Mains Construction

## New Construction Standard for Sub-Transmission U/G Works (33kV, 66kV, and 132kV)

A new construction standard has been developed to cover all underground (U/G) sub-transmission works at 33kV, 66kV, and 132kV voltage levels. This standard is MCI0010, which consolidates key content from the following sources:

- Transmission Specification – commonly used by EE PMO
- TB 0345 – Spare sub-transmission duct design
  - Detailed transmission U/G construction requirements including Joint bays/ Trenching/Pits(coms and earthing)/Cable jointing/sheath bonding etc.
  - Approved Materials List – including cables, joints, and Link Boxes
  - Detailed Drawings – covering trench cross-sections and joint bay layouts

All transmission mains construction works must be inspected in accordance with the following **Inspection and Test Plans (ITPs): Appendix –Inspection and Test Plans**

1. ITP 1 – Trenching, Conduit Installation and Backfilling
2. ITP 2 – Cable Installation
3. ITP 3 – Cable Jointing
4. ITP 4 – Joint Bay Filling and Restoration



# Key changes – MDI0028 Underground Distribution Network Design

New clause 3.6.1 Stratum Subdivisions

New clause 3.17 Ground batteries

New clause 3.18 Electric Vehicle Charging Provisioning

New clause 3.19 Innovation

Revision to clause 4.6 Supplies to multi-dwelling strata developments relating to utilisation of existing under-utilised padmount/indoor substations in close proximity

Revision to Clause 4.10 In residential subdivisions where streetlight columns are located adjacent to residential lots the use of enlarged base streetlight columns (in lieu of slimline columns) should be applied to allow provision for future service connections provided the streetlight columns are interspersed between pillars and not cascaded.

New clause 6.14 Distribution Substation Monitoring

Inclusion of requirement for switching stations where HV interconnections are required to address footprint limitations with our 3-feeder design which has been impacted by switchgear availability due to the future transition to non SF6 (TB0354).



# Key changes – MDI0051

## Transmission Underground Design

New Clause 4.1/4.2 detailing requirements for project Design Brief , specifying minimum design documentation to be submitted for projects

New Clause 4.7.3 outlining requirement for inclusion of distributed temperature sensing (DTS) conduits for all future 132kV conduit installations.

New Clauses 4.7.4 and 4.7.5 providing additional requirements for spare conduits, conduit bends, and consideration of feeder ratings.

New Clause 4.8.1/4.9/4.10 providing additional requirements for trench alignments and associated drawing, along with notifications, detail for cable trench profiles and site access requirements.

Clause 4.11 expanded detail for separation between adjacent cable circuits /Table 4 - clearances to assets of other utilities, revised to align with current requirements.

Clause 4.16 numerous minor changes to requirements for joint bay and pit design and earthing requirements including updates to dimensions and other criteria in Tables 5 thru 7 and fully revised joint bay design drawing.



# Key changes – MCI0006 Underground Distribution Construction

Clause 2.6 updated to require for all contestable works projects ASPs to provide evidence that supporting structures such as fire walls and retaining walls that are required to allow the electricity works to be located at a site are included in the council submission (as part of the Development Application under part 4 of the Environmental Planning and Assessment Act).

Clause 3.2.4 added to provide instructions on abandoned paper insulated cables left in the ground.

Clause 3.2.9 Introduced the requirement that underground LV, service and street light cables shall be mechanically protected for the first 3 metres up the pole.

Clause 4.4.2.1 'Mechanical Protection of Road Crossing Conduits' has been added to provide clear guidance on this scenario.

Clause 5.2.1 'Location of Pillars' revised to provide greater clarification of requirements near driveways.

Clause 5.4 'Service Connections' revised to clarify detailed connection requirements for new and existing service pillars.

Clause 5.7.4 additional wording to clarify that 'new' service mains must be continuous (no joins or connections in between) in line with NSW Wiring Rules.

Additional or amended stock code information has been included.



# New equipment introduction

**Community Batteries/ LVSTAT com/EV  
charges/EFDs/Fire mesh on timber  
poles/Dsub monitors**

(Not required to be in new designs, just for awareness)

# New Equipment/Apparatus



**LV Statcoms** – a type of LV voltage regulator, improving quality of supply for customers especially in the presence of solar PV.

For a loss of network supply the LV Statcom will automatically disconnect from the network via an internal contactor in accordance with AS4777.



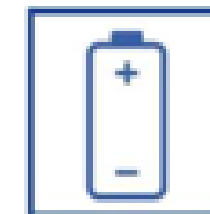
**Early Fault Detectors (EFDs)** are a network monitoring technology designed to detect primary equipment defects prior to them resulting in functional equipment failure, now be installed in Distribution and transmission poles.



# New Equipment/Apparatus



**Pole Mounted Batteries**



**Ground Mounted Batteries**



# New Equipment/Apparatus



**Padmount Based EV Charger** – Compliant with AS/NZS 3000 wiring rules and access to padmount doors maintained.

**Pole Mounted EV Chargers** – Compliant with AS/NZS 3000 wiring rules and clearances to OH maintained.



# New Equipment/Apparatus



## Dsub Monitors

Will soon come fitted in all new padmount substations.

No change in process for ASPs installing these padmounts.

Construction Coordinators will commission the monitor after padmount is electrically commissioned.



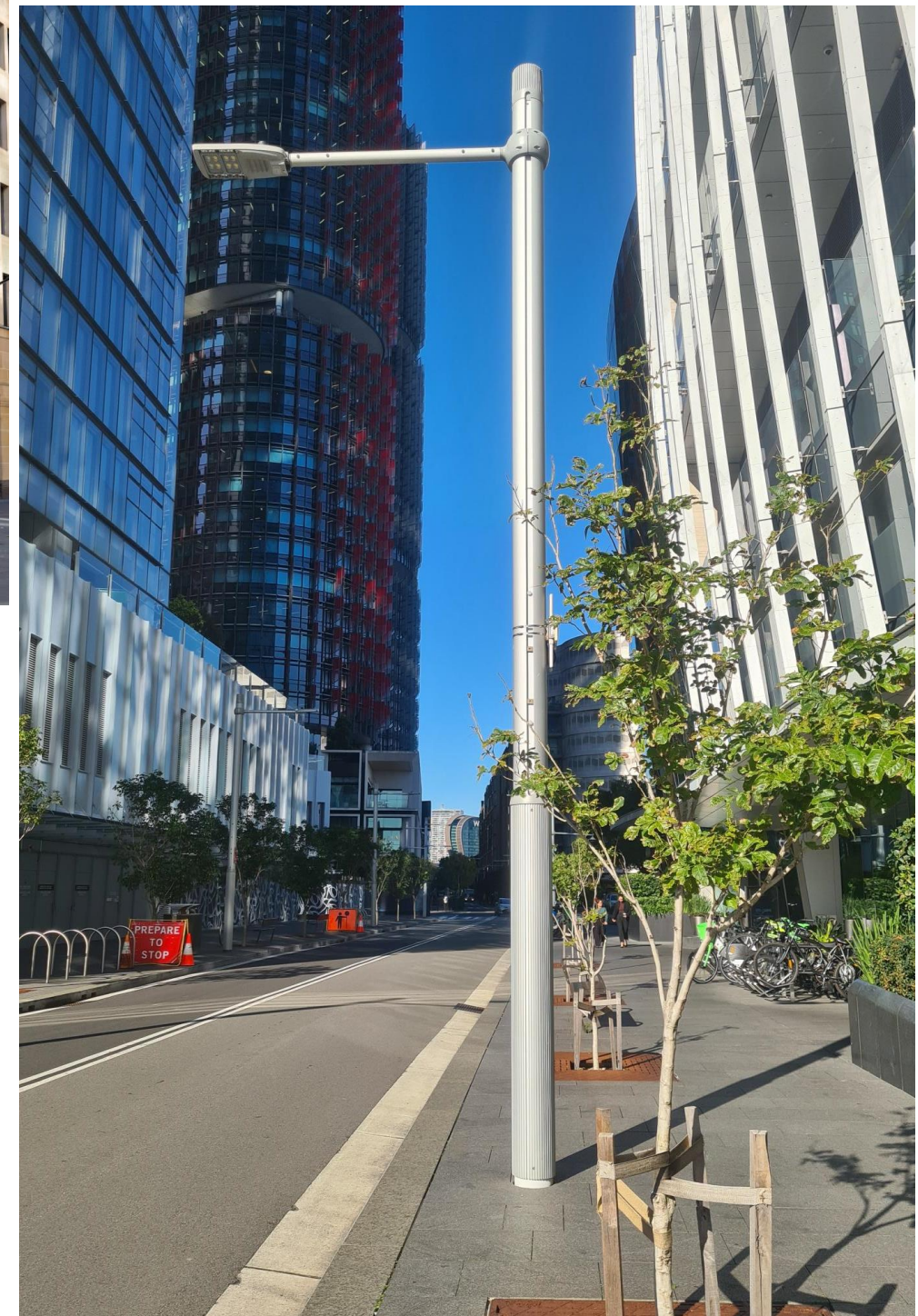
## Fire Mesh

Fire mesh wraps around timber poles in bush fire vulnerable areas will be common as there is a program to install these.

# New equipment introduction

**Multifunction poles,  
Non SF6 switchgear(LBSs/RMUs)  
High-capacity conductors and  
cables**

(Products in Trial stage – Communications will be issued in due course )



Non SF6 LBSs



Multi Function Poles/Columns

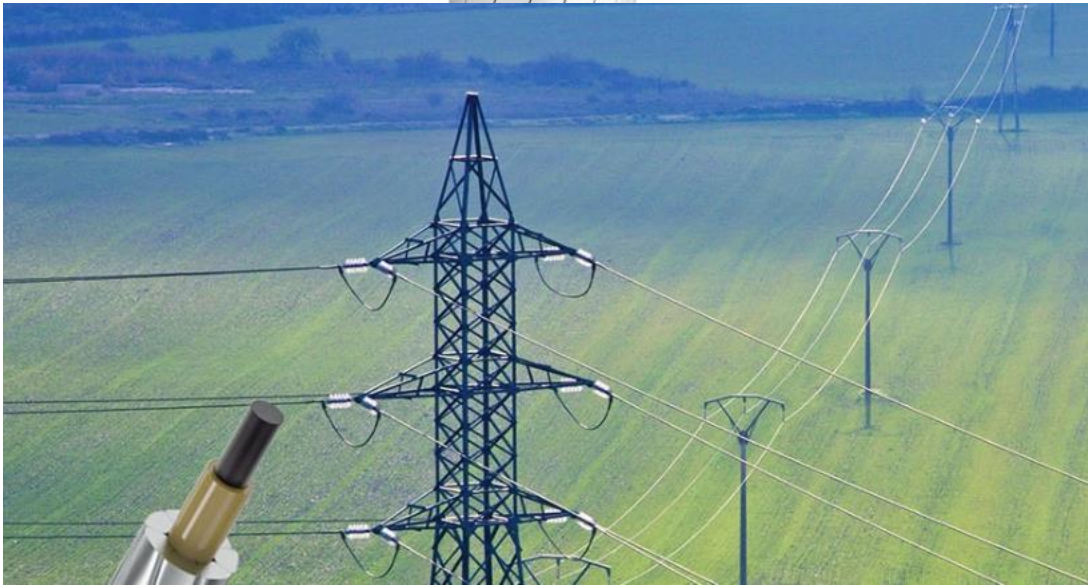
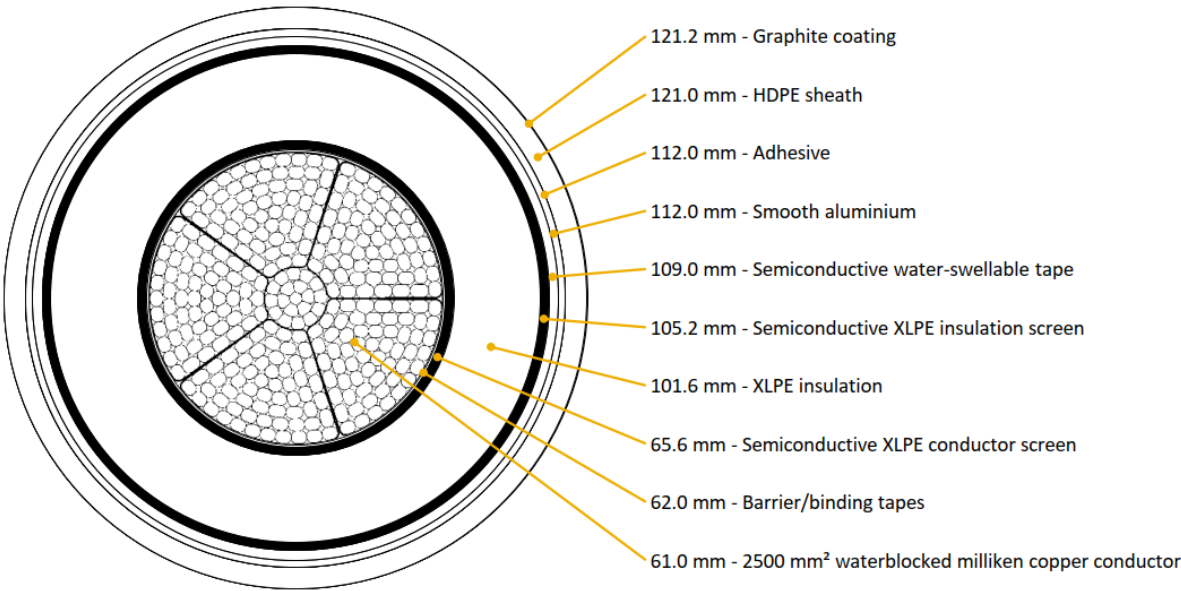
# High-Capacity Cables(2500mm<sup>2</sup> and SAS) and Conductors(HTLS) for transmission feeders



The ACCC<sup>®</sup> SOLUTION



2500 mm<sup>2</sup> WBCu 76/132 kV XLPE/SAS/HDPE/GC



Nominal cable diameter:	121.2 mm
Approximate cable mass:	32 kg/m

# Opportunities for Improvement

# Opportunities for Improvement / Clarifications / Questions?

The requirement of a steel plinth for padmount substations with Siemens automated RMU?

The requirement for a steel plinth for padmount substations with Siemens automated RMUs is outlined in TB0314, which generally explains that a galvanised steel plinth is required when automated Siemens RMUs are used. However, SDI210, the Substation Design Instruction for Siemens RMUs, will be updated this year to clear up any ambiguities

On new version of MCI0006, the thickness of concrete protection layer for cables and conduits installed in easements have been reduced from 75mm to 50mm compared to previous version of MCI0006? [Drawing 060862](#) has been updated to align with the 50mm concrete protection layer.

Clarification on EE requirements relating to under-bore construction [will be confirmed by a Technical Bulletin \(TB\) or by amending ETS 0081 soon.](#)

# Opportunities for Improvement / Clarifications / Questions?

**Technical Bulletins (TBs):** We appreciate the feedback regarding the issue of technical bulletins as interim updates to standards and the impact this has on readability of some of our standards where multiple TBs have been issued.

We are introducing 'minor amendments' as a way of reducing the number of technical bulletins issued. Minor amendments will be issued when a standard requires update and it has undergone a full revision/amendment in recent years. For minor amendments the relevant clause change will be in the document itself and flagged in grey within the document and it will be listed in a minor amendments table at the front of the document - and the document amendment number will increase as a decimal point ie. go from 4.0 to 4.1 for example.

We may still need to publish technical bulletins for older standards where a change is necessary but there is insufficient time to do a full revision of the document. We appreciate this is not ideal but need to balance priorities of assessing and introducing new equipment as the industry continues to evolve at a rapid pace.

# Opportunities for Improvement / Clarifications / Questions?

AS/NZ Draft Standards for Comment" where proposed network standards have been available for comment and input by ASPs. S 1158.4:2024 - Updated Pedestrian Crossing Lighting Standard ? [The lower wattage is currently under review for the AEMO load table, with results expected in 8 weeks. Endeavour Energy is working on approving these standards for the AML before tariffs are raised, to provide ASPs with something to use in their designs. \(ETA for complete approval: January 2026\)](#)

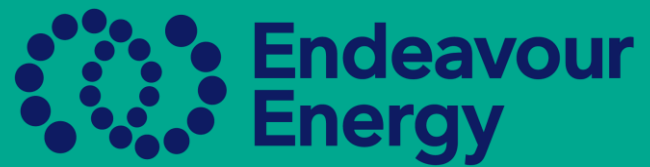
"Draft Standards for Comment" where proposed network standards have been available for comment and input by ASPs. There have been updated / new standards placed in the Standards portal that have not been available for input comment by ASPs. Is the "Draft Standards for Comment" section redundant; or has Endeavour Energy stopped this process?

[When amending standards that significantly impact ASPs, these changes are generally communicated through CNS and other channels. For example, during the ASP seminar in 2023, major changes to MDI0031 were presented. For such impactful standards, we often allow a transition window. All other standards and specifications are shared with CNS as part of the consultation process, and ASPs are welcome to provide any comments via the CNS team for our consideration.](#)

# Questions

# Lunch break

Please re-join us at 12:30pm



# Safety

**Riley Bryn**  
Public Safety Manager

**Tony Vellio**  
Customer Delivery Manager

**POWER**  
together

Intended audience: ASP 3  
12:30pm – 1pm

## Introduction

Since 2001 there have been over 150 fatalities in Australia and New Zealand involving contact with powerlines or underground cables.

90% of electrical fatalities are a result of contact with overhead powerlines.

On average across Australia there are 6 powerline related deaths per year.



# Endeavour Energy Network Coverage

Our network spans 24,800 square kms and is made up of more than 185 major substations, 416,000 power poles and 32,000 smaller substations connected by 47,000 kms (more than the distance from Sydney to London and back) of underground and overhead cables.

Endeavour Energy services the high growth regions of NSW, with the population of Greater Western Sydney forecast to grow approximately by almost one million people by 2031.

Our franchise area includes the Northwest and Southwest priority growth areas of Sydney which will see 500,000 new residents over 30 years.

These priority growth areas are the result of the biggest coordinated land release in NSW's history.



## Urban Expansion

Western Sydney and other surrounding areas within Endeavour Energy's franchise area are undergoing major infrastructure development, asset relocation and urban expansion as a result of increased government funding and the establishment of the new Western Sydney Airport.

Despite ongoing public safety initiatives and awareness campaigns, there is an increased trend that can be observed in overhead and underground asset strikes.

Endeavour Energy's statistics are directly related to the higher volume of worker activity within our franchise area.



Today



1970's

# Underground Cable Strikes

**~50 – 60**

Underground cable strikes  
reported per year on average

- Backhoes
- Excavators
- Piling rigs
- Power saws
- Star Stakes
- Fence Posts

This literally equates to an event every week  
that had the potential to cause death and/or  
serious injury.

**In FY24 excavation incidents cost almost  
customers ~\$2.5M in outage related  
impact.**



# Overhead Conductor Strikes

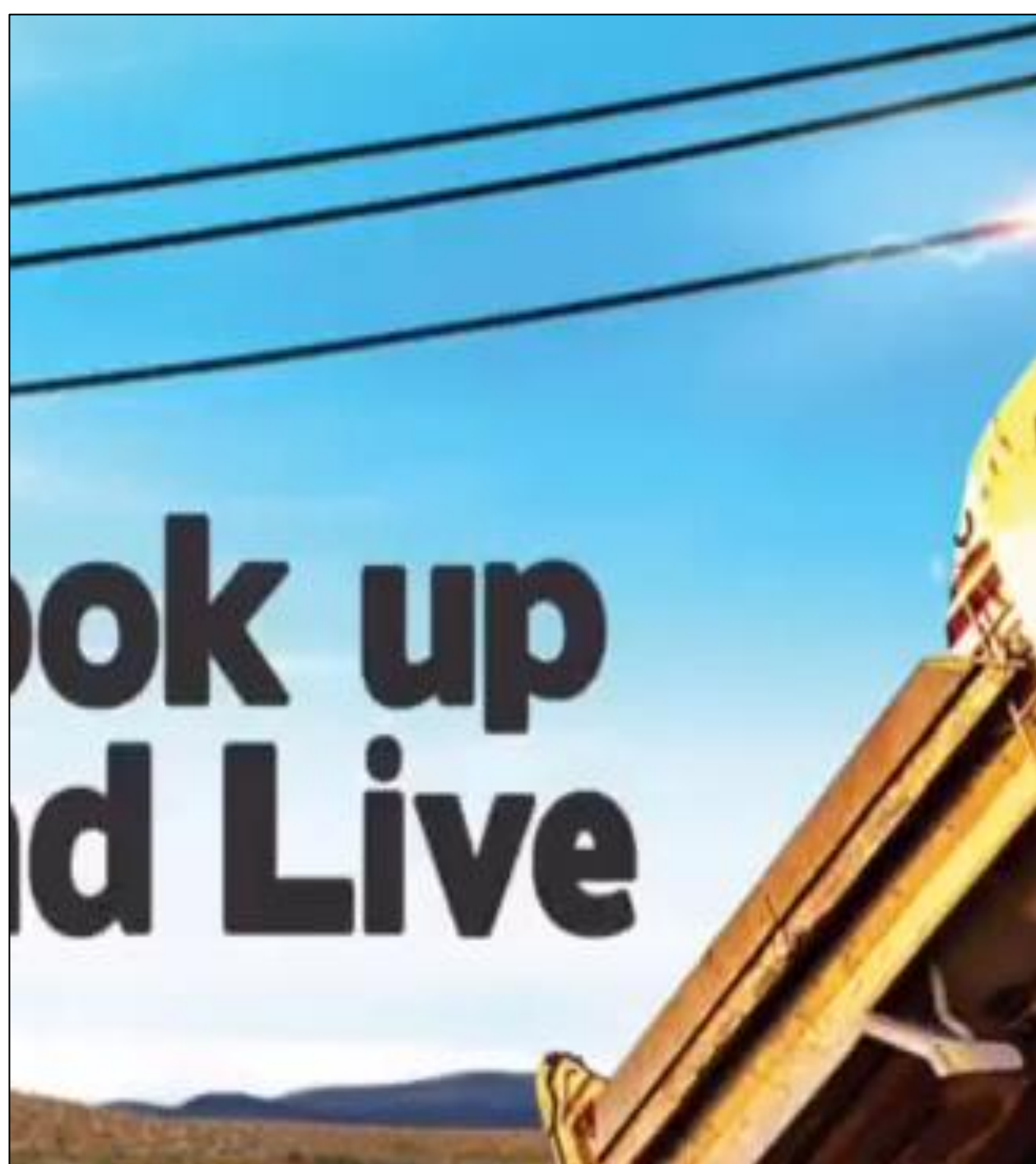
**~200 - 250**

Overhead conductor strikes reported per year on average

- Over-height transport and logistics
- Cranes and hiabs
- Tippers
- Garbage trucks
- Farming and agricultural equipment

This almost equates to an event every weekday that had the potential to cause death and/or serious injury.

**In FY24 powerline incidents cost customers over \$10M in outage related impact.**



## Civil Industries

In NSW, civil construction is increasing year on year.

Plant contact is a frequent event due to inadequate vehicle movement plans and height limitations on work sites.



# Waste Management



# Public Interaction

**~300 - 350**

General public interactions reported per year on average

- Fallen conductors
- Vehicle impacts
- Vandalism and deliberate damage
- Unauthorised access
- Construction activity

This almost equates to an event every day that had the potential to cause death and/or serious injury.



## Vehicle impacts

Power poles and pillars continue to be impacted across our network ranging in severity and consequence.

Often when poles are impacted there can be fallen powerlines, reduced clearances and hazards that may be not immediately visible.

It is critical to assess the situation before rushing in to assist and provide help.



# Asset Strikes



## Fallen Trees

One of the biggest activities on our network is the management of overgrown trees and fallen vegetation on our powerlines.

Often this will cause significant power outages, result in fallen powerlines and potentially cause bushfires in heavily dense vegetation areas.



# Fallen Powerlines

Fallen powerlines can be deadly.

They can be damaged by fallen trees, lightning strikes, car accidents, vandalism, fires, birds or other animals and flying debris during high winds.

Never approach fallen powerlines. Keep at least 8 metres away from them and anything they may be touching such as trees and fences as there may be a risk of touch or step potential voltage.

**Stay, Call and Wait**



## Touch Potential

Touch potential refers to how you touch an object that has been electrified by a downed power line or any conductor of electricity.

The electrical current flowing through the object enters your body through your hand and leaves through your feet, causing damage to your internal organs.

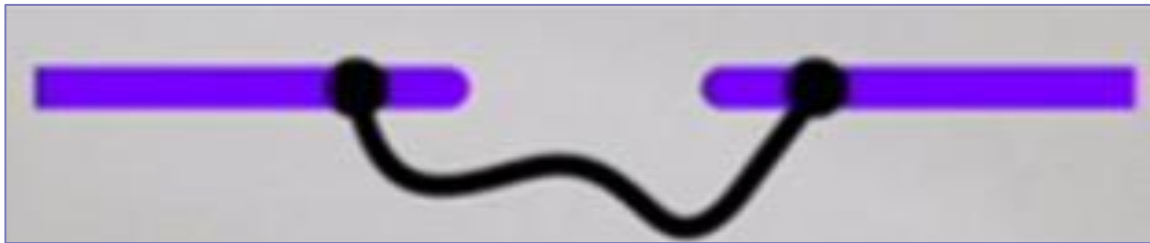


# Transfer Potential

A transferred potential (or voltage) is defined as a touch voltage scenario where a voltage is transferred through a conductive medium making a return path to the source.

Examples may include copper water pipes, metallic services, etc.

It is critical to ensure that when making or breaking conductive materials in the ground or metallic pipework, to 'bridge the gap' and avoid the current flowing through your body.



**What can we  
do about it?**

## Aerial Markers

There are alternative visual markers available which have been adapted from the aviation industry that provide effective warning to workers onsite with a wind powered rotating aerial device.

A mix of tiger tails, bunting, signage and rota-markers can be used and effectively draws attention to the overhead powerlines.

Energy QLD have reported a large uptake in the installation of these markers and a significant reduction in overhead powerline strikes (~75%).

These markers are available in NSW and will become more commonly used on construction and agricultural sites.





**How can we plan  
and prepare for  
underground  
assets?**

## Before You Dig Australia

The most effective way to prevent an incident is to be prepared for the site conditions and have the relevant site drawings.

Before penetrating the ground, understand what may be underneath you.

Just because you can't see anything, doesn't mean it isn't there!

Across Endeavour Energy's network there are over **16,000kms** of underground cables.

We partner with BYDA and share their core vision to prevent injury and reduce damage to our members' infrastructure assets.



# Planning/Preparation is critical!

Never attempt to touch or access electrical assets and equipment, please contact Endeavour Energy for advice and further support onsite.

Following the Five Ps of Safe Excavation guidelines can ensure the right steps are taken:

## The 5Ps of Safe Excavation



### Plan

Plan your job. Use the BYDA service at least one day before your job is due to begin, and ensure you have the correct information required to carry out a safe project.



### Prepare

Prepare by communicating with asset owners if you need assistance. Look for clues onsite. Engage a Certified Locator.



### Pothole

Potholing is physically sighting the asset by hand digging or hydro vacuum extraction.



### Protect

Protecting and supporting the exposed infrastructure is the responsibility of the excavator. Always erect safety barriers in areas of risk and enforce exclusion zones.



### Proceed

Only proceed with your excavation work after planning, preparing, potholing (unless prohibited), and having protective measures in place.



# Planning/Preparation is critical!

Ensure you are familiar with the site and comprehensively inspect the areas.

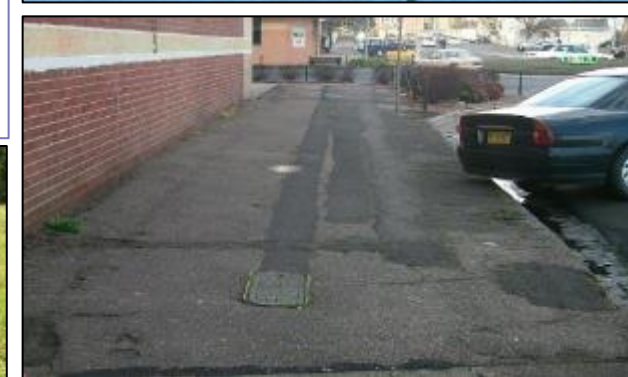
Understand any plant/equipment limitations, movements and mobilisation across the site.

Obtain contact details for asset owners and follow all safe work practices and guidance.

Look UP and check for powerlines, Look DOWN and search for markings, assets, evidence of trenching, pits, covers, etc.

**Maintain 600mm from underground power cables when using powered excavation.**

Refer to [Safe Work NSW – Work Near Underground Assets Guide](#)



## Planning/Preparation is critical!

In NSW, the penalty for interference with electricity or gas works has been doubled to \$22,000 for individuals and \$440,000 for corporations.

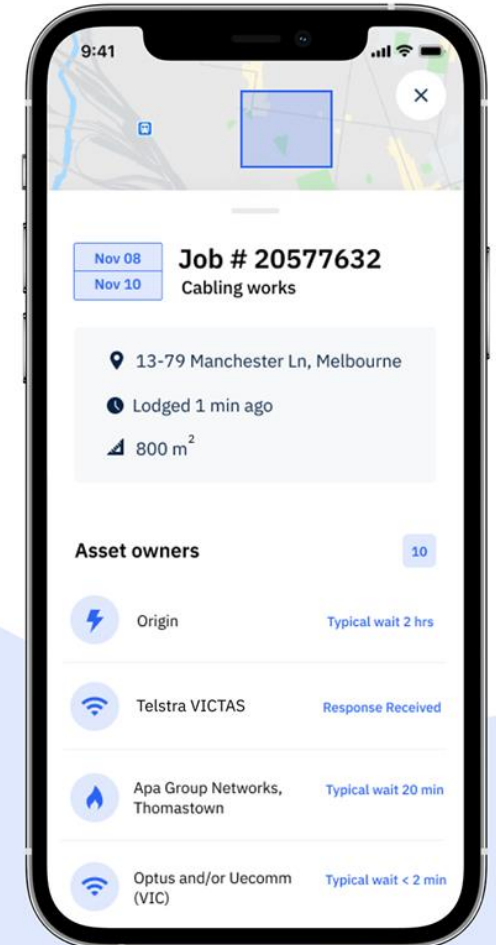
In addition, you might receive a jail sentence of up to 5 years for causing interference with gas or electrical services.

Obtaining a BYDA referral is legislated for all critical infrastructure.



### Receive your maps

Asset owners will respond to your enquiry with maps and other relevant safety information.



**How can we plan  
and prepare for  
powerlines?**

## Look Up and Live

The most effective way to prevent an incident is to be prepared for the site conditions.

Before mobilising to site and operating plant or equipment, take the time to look up and inspect for powerlines and other overhead services.

Ensure you are familiar with the operating heights of your machinery, assess travel routes and know the safe approach distance to powerlines.

We have partnered with the creators of 'Look Up And Live' (Energy QLD) and other Electricity Utilities by providing access to our Powerline network data for customers to be able to utilise the Powerline safety planning tool.



***Powered by BEFORE YOU DIG***

**Look  
up  
and  
Live**

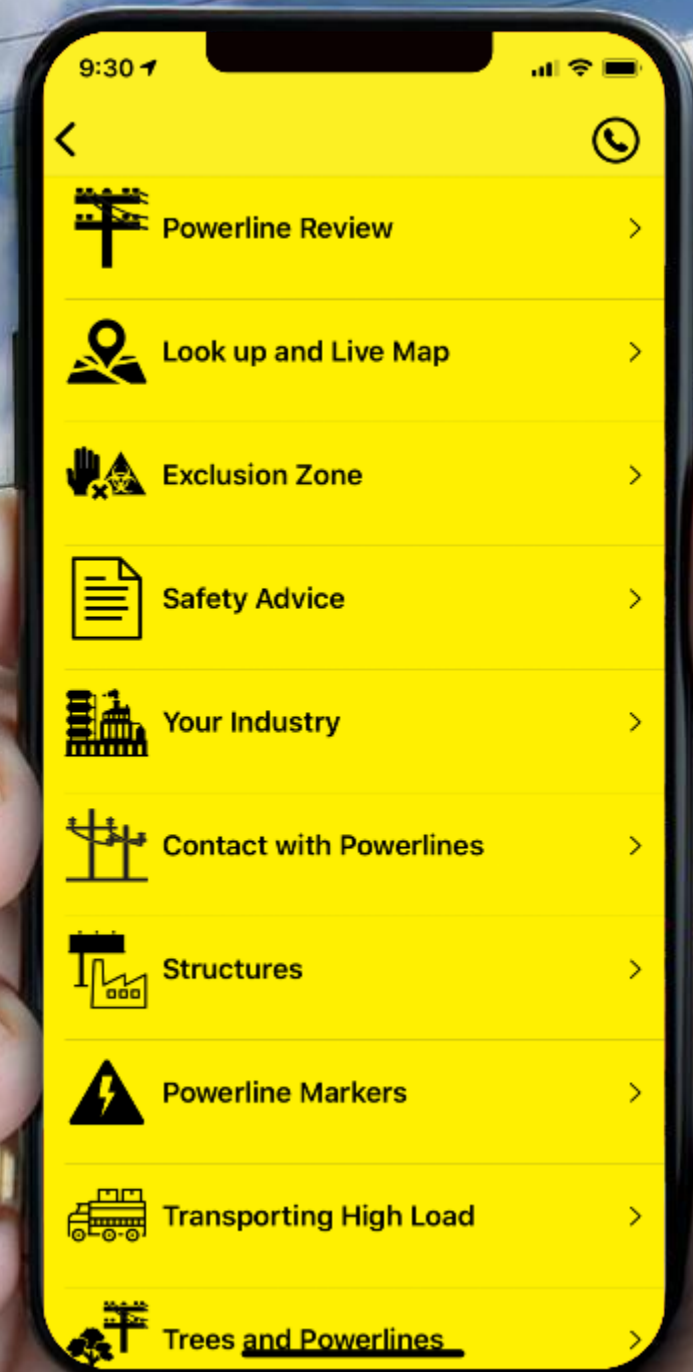
# Powerline Safety at your fingertips

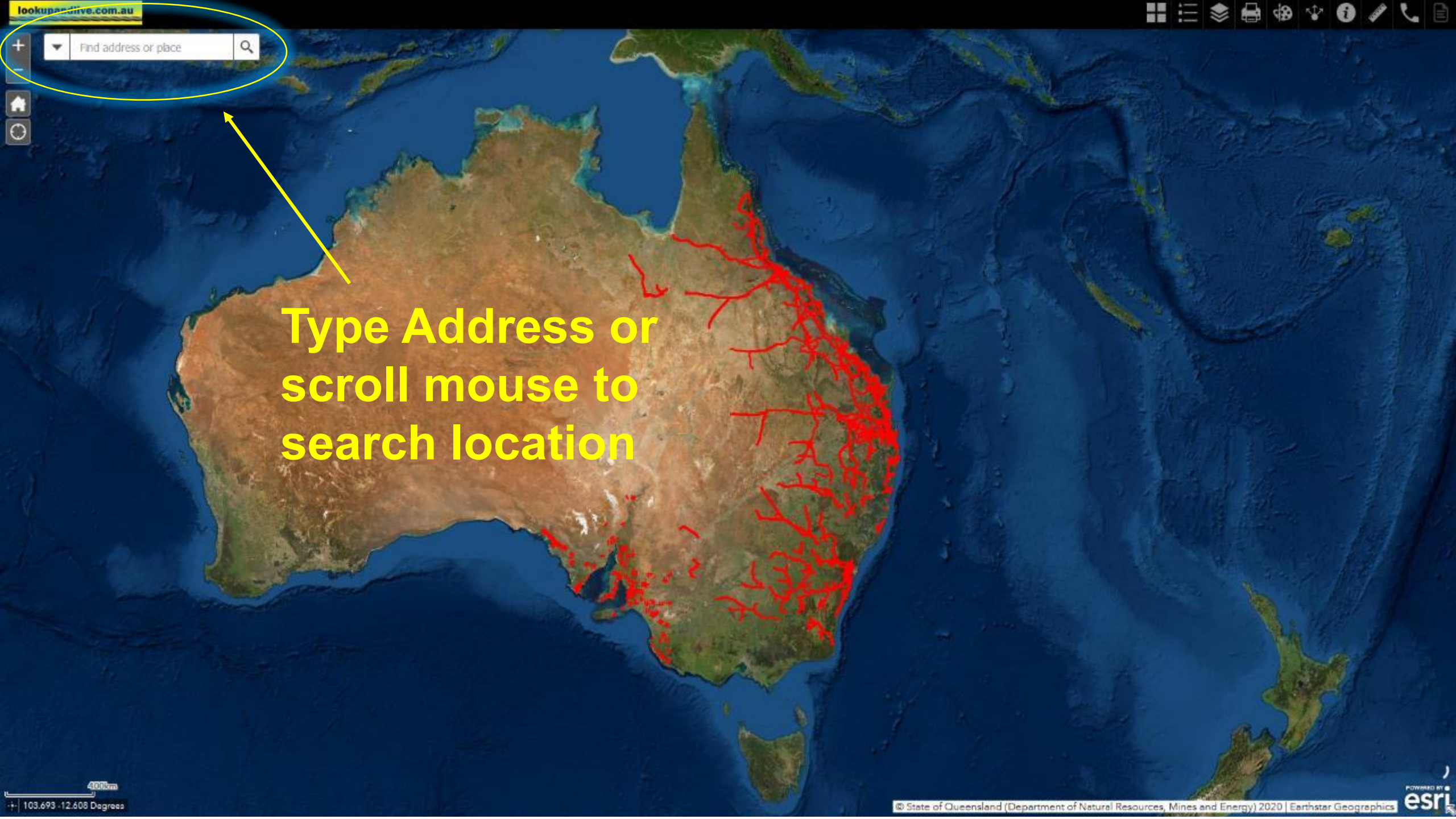


Download on the  
**App Store**

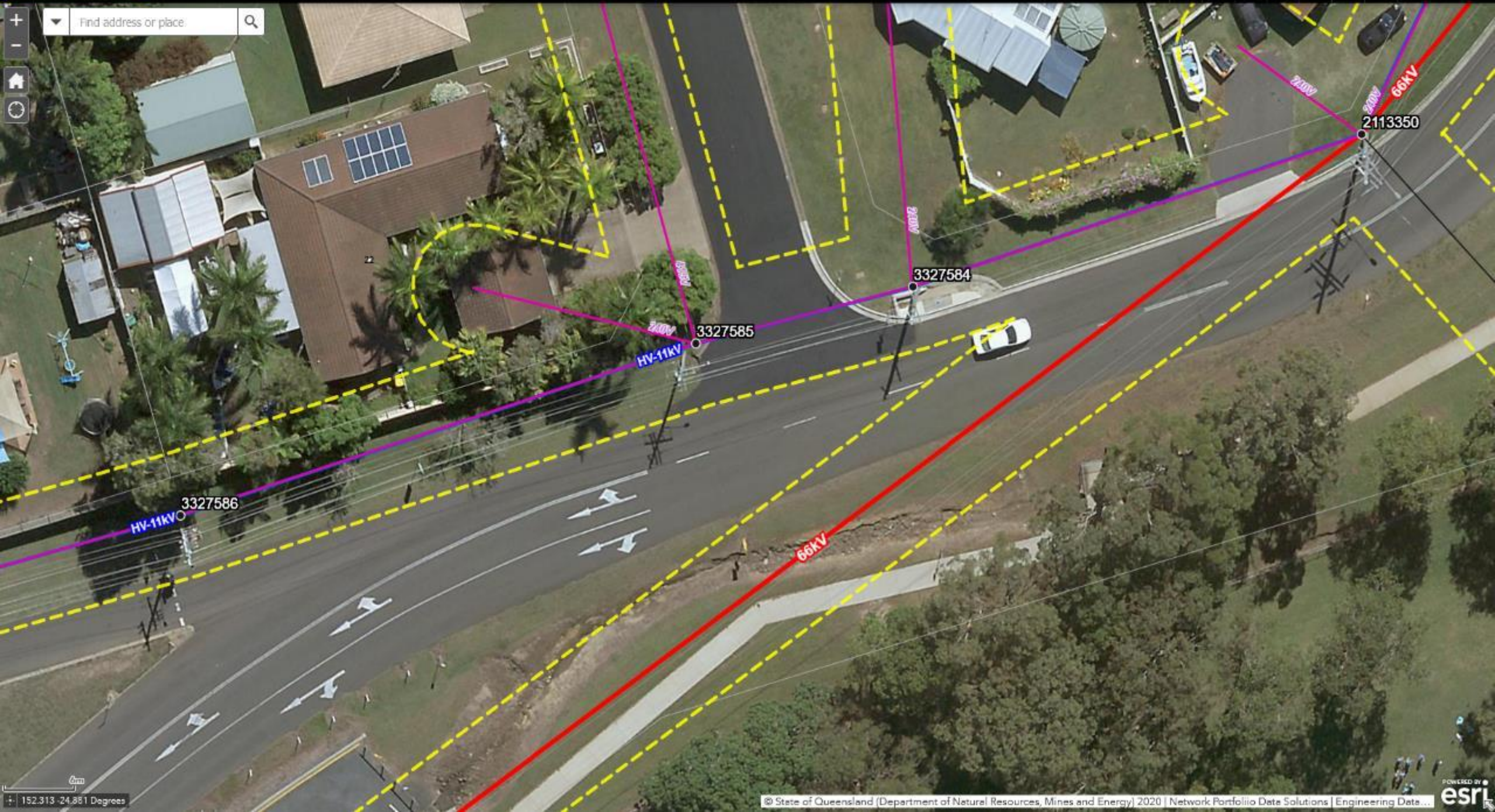


GET IT ON  
**Google Play**

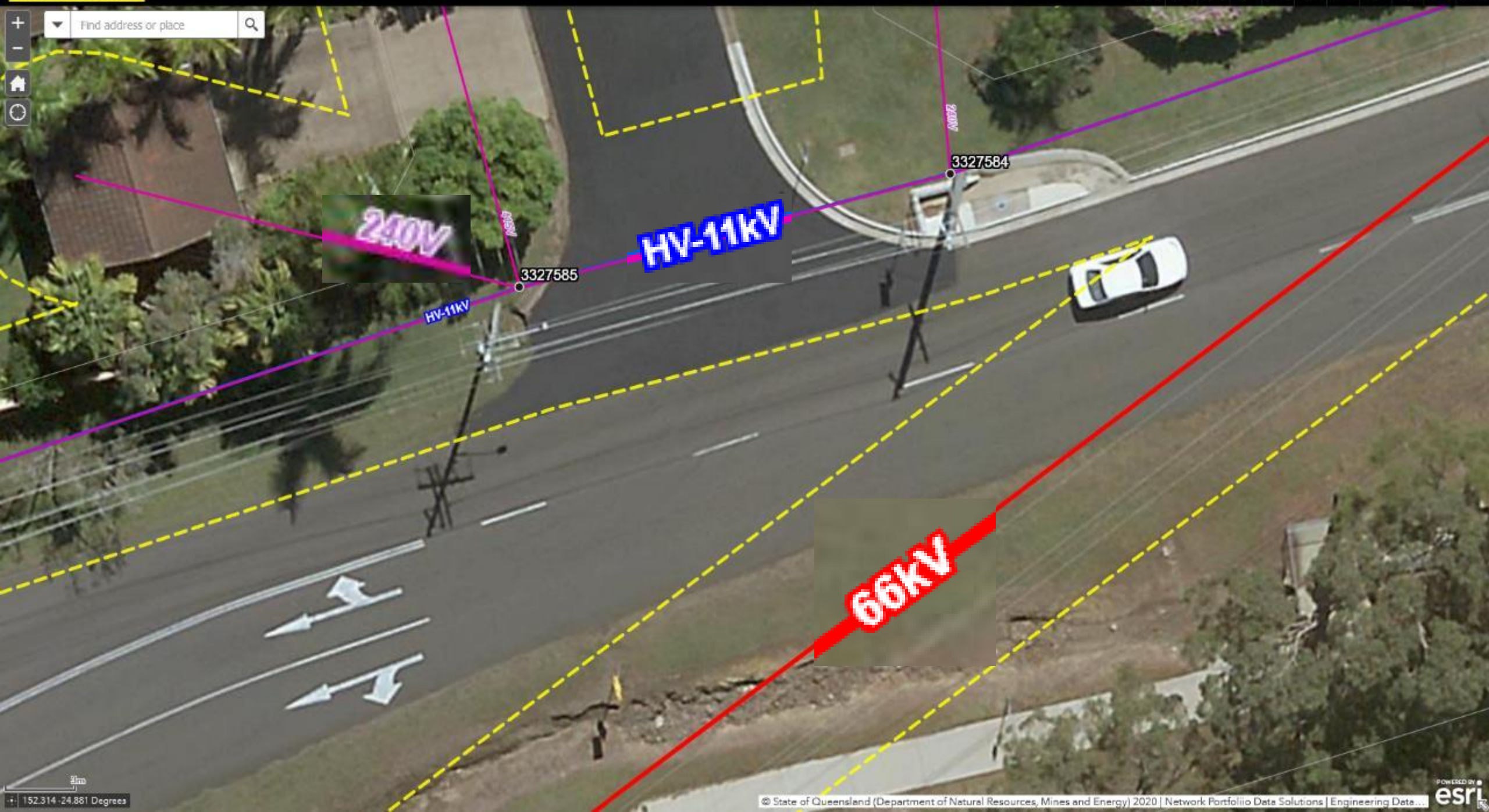




Type Address or  
scroll mouse to  
search location



Find address or place



Click on powerline to see more information



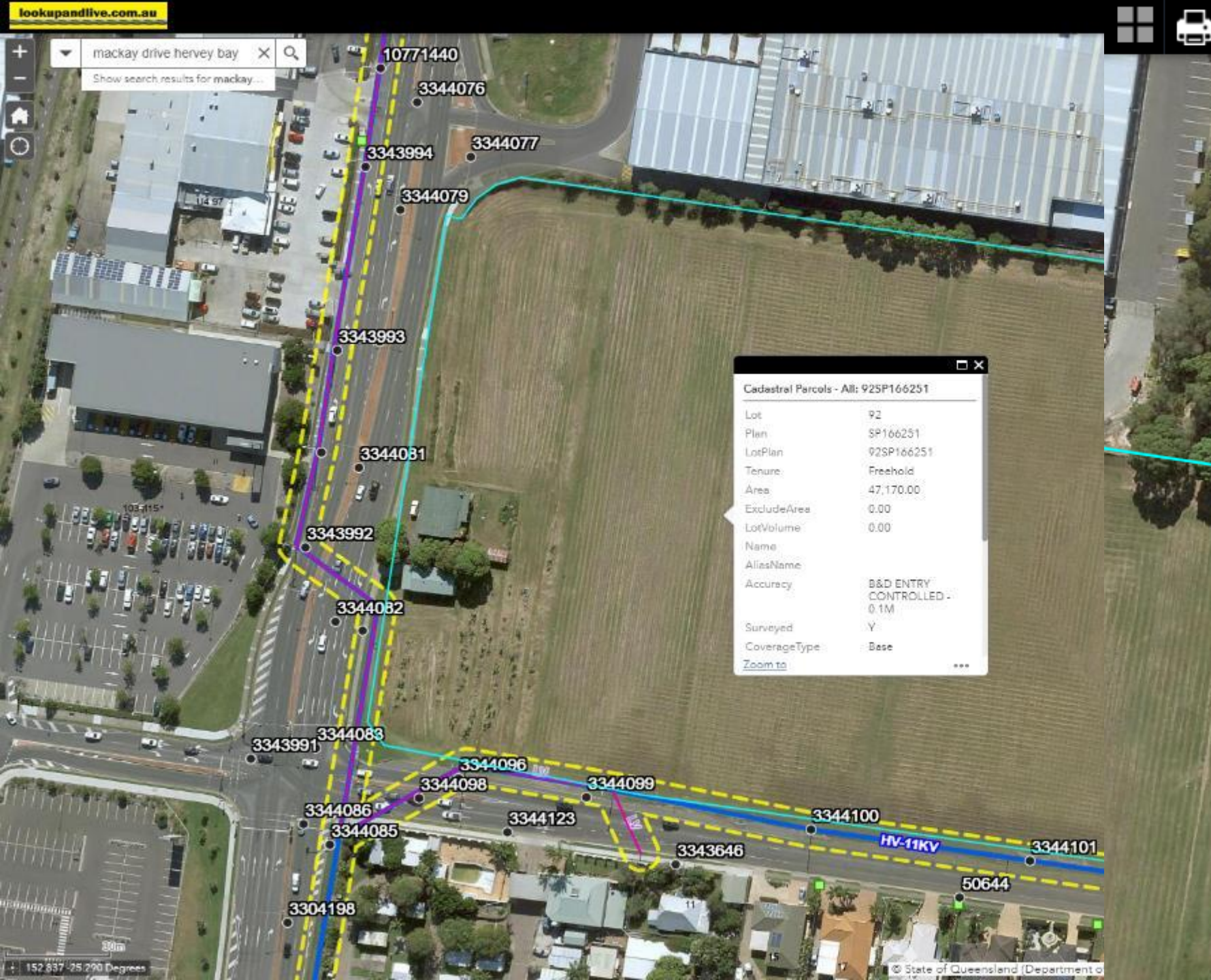
Span Type: 33kV  
[Endeavour Energy Links](#)



Click to get property  
information



▼ mackay drive hervey bay ✕ 🔍  
Show search results for mackay...



## Print

Map title: Look Up and Live Map

Layout: A4 Landscape

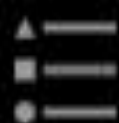
Format: PDF

⚙️ Advanced

🖨️ Print

1. 📄 Look Up and Live Map

🗑️ Clear prints



## Measurement

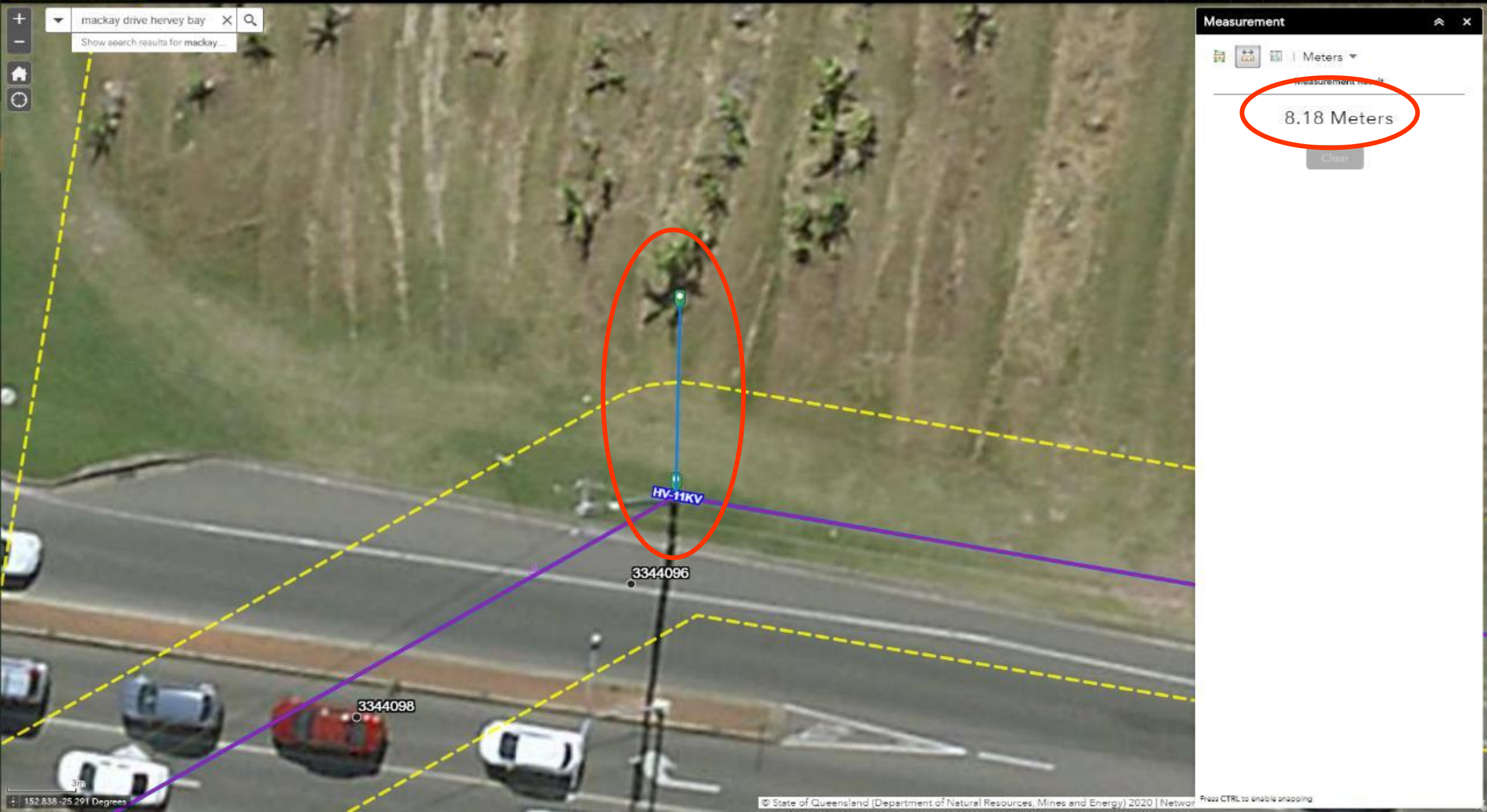
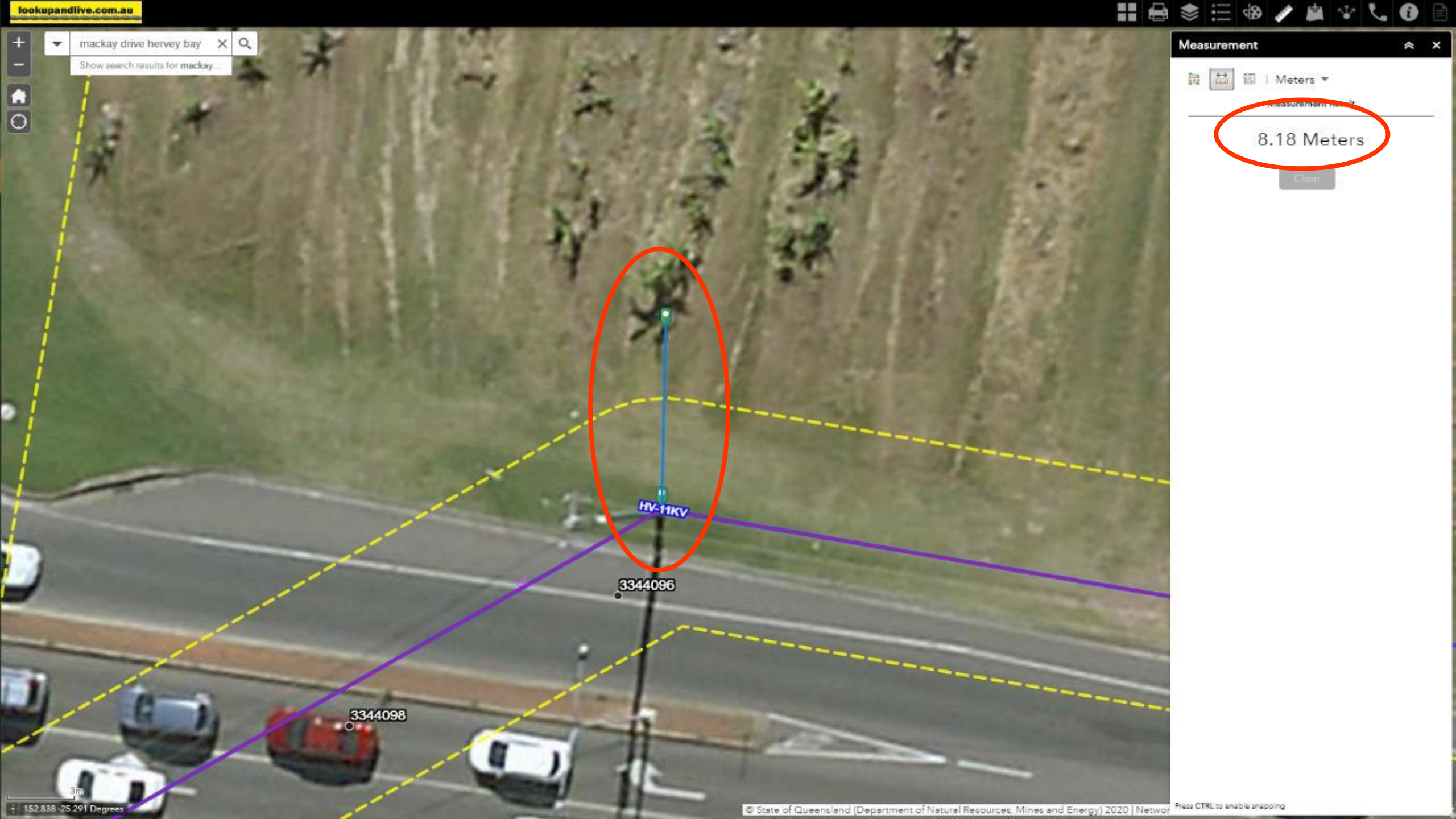


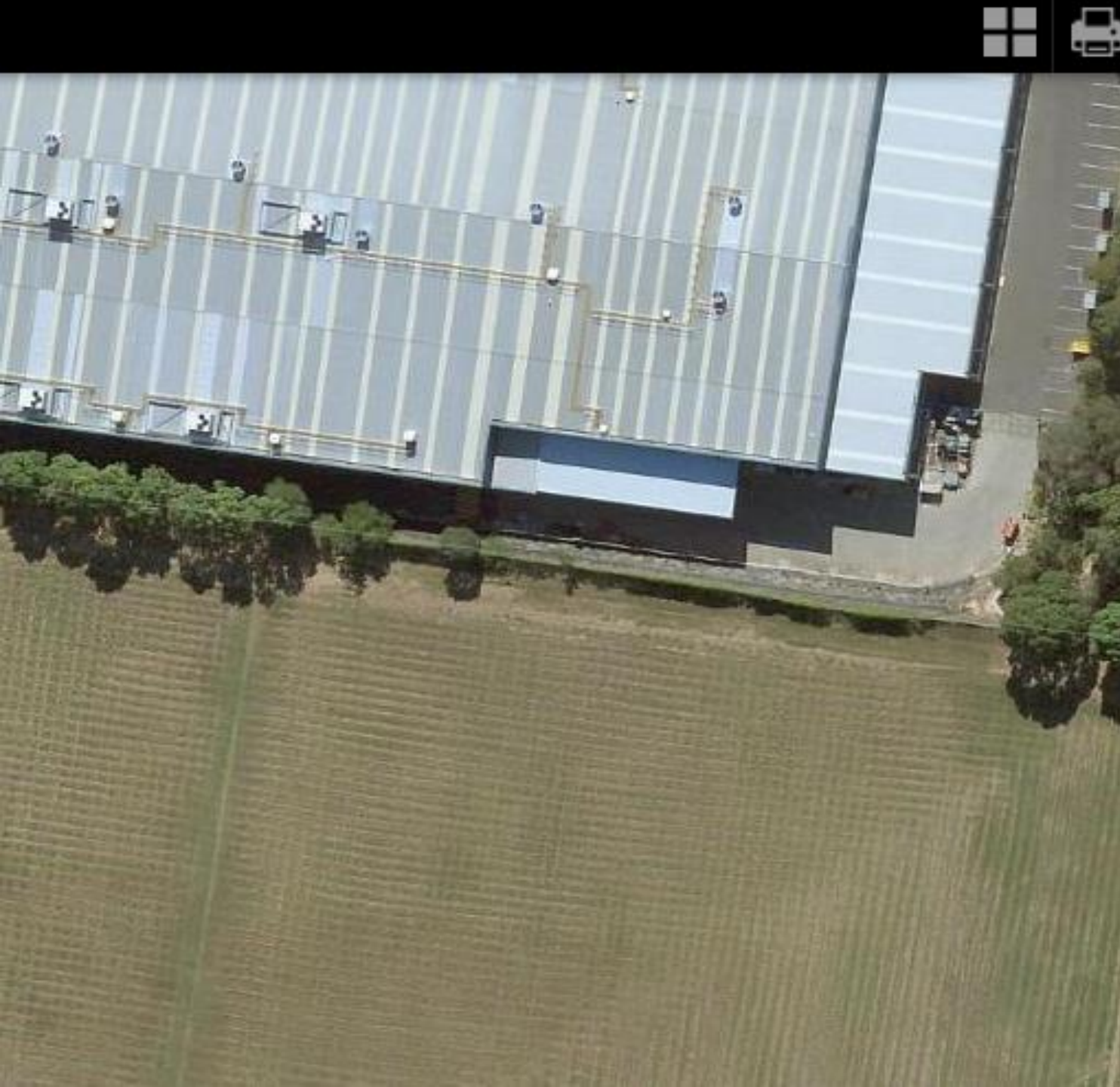
| Meters ▼

Measurement Result

---

Clear





## Disclaimer



**lookupandlive.com.au**



Download on the  
**App Store**



GET IT ON  
**Google Play**

## Disclaimer

The Look up and Live map is an interactive geospatial map that has been developed to display the Energex, Ergon Energy, Endeavour Energy, Essential Energy, SA Power Networks and Powerlink electricity networks, including sourced third party information.





## Key Messages


- Planning and preparation are fundamental steps – *Have a plan*
- Use a Safety Observer and Maintain Safe Approach Distances at all times
- Have the courage to speak and the character to listen. *If you see something that doesn't look quite right, speak up – it may just save a life!*

**Look up and around  
for powerlines**

Understand safe approach distances  
at your worksite, and when power  
needs to be isolated.

  
Download  
the App



  
**BEFORE  
YOU DIG**  
[www.byda.com.au](http://www.byda.com.au)

**Make sure you know  
what lies beneath**

Always visit **BYDA.com.au** before  
you start, to identify cables  
and keep you safe.

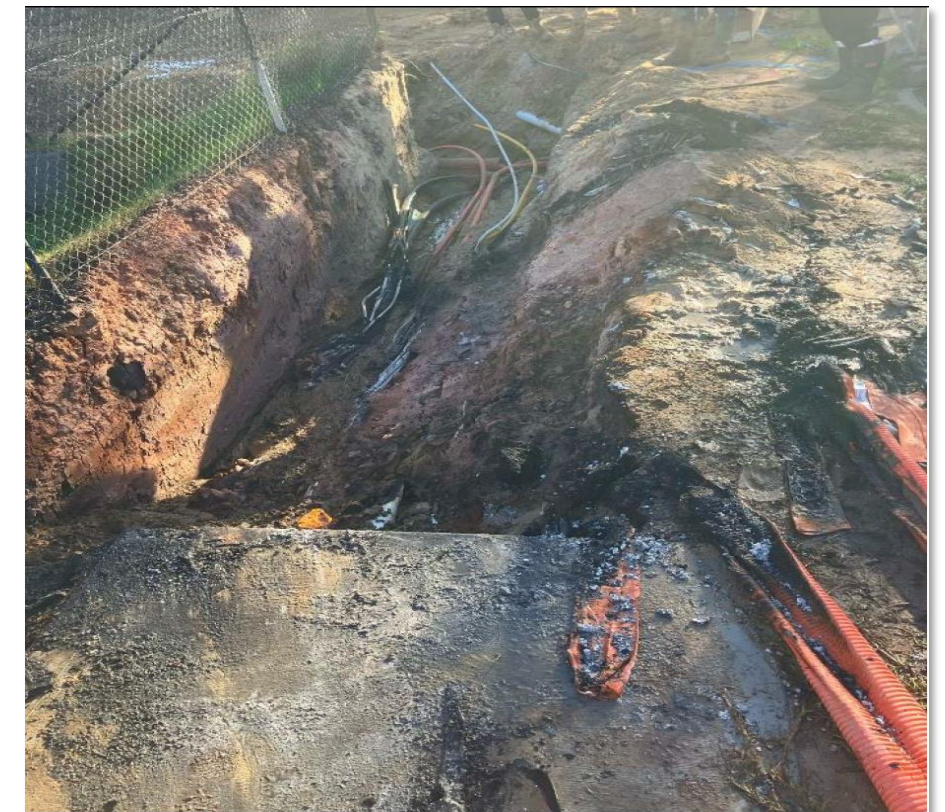
# Edmondson Park (July 2023)

An ASP was completing a HV STJ in an excavation at Edmonson Park that had ignited a consumer gas main, resulting in burns to one of their workers as well as damage to tools, private property, and parts of the network. Endeavour Energy staff were near the work site and responded; rescuing the worker, providing first aid and calling for additional assistance.



# Austral (May 2025)

A Level 1 ASP was conducting jointing works under Access Authority (AA) conditions when an adjacent gas main leaked further along the joint bay. During hot works, the gas ignited and caused an explosion.



# ASP1's working on our network

## ASP's responsibility

Ensure current BYDA relevant to the works being undertaken is submitted to Construction Coordinator as part of Project commencement notification.

Identify Gas detection measures to have in place whilst working around Gas assets via risk assessment & SWMS .



## CC's responsibility

Review L1ASP project commencement paperwork to ensure current copy of BYDA is valid for the proposed worksite & review site risks with ASP at initial site meeting.

Recommend the use of appropriate Gas detection while working in open trenching as “best practice”

Ensure Gas detection & mitigation measures are in use for any jointing works around Gas assets under outage conditions. This could be a combination of isolation, safety observer, mechanical protection and gas detection.

# What is a confined space?

# Confined Spaces

If you suspect a worksite may be deemed a confined space, do not enter the area and contact your manager / WHS Business Partner.

A confined space may be an enclosed or partially enclosed space that is not designed or intended primarily for human occupancy, with a risk of one or more of the following:

- an oxygen concentration outside the safe range,
- airborne contaminants that may cause injury or death,
- flammable airborne contaminant that may cause injury from fire or explosion,
- engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning.

## Evacuation Exemption

From the NSW Confined Spaces Code of Practice: 'Trenches are not considered confined spaces based on the risk of structural collapse alone, but will be confined spaces if they potentially contain concentrations of airborne contaminants that may cause impairment, loss of consciousness or asphyxiation'. Therefore, continuous monitoring is best practice.

Further guidance on excavation safety is available in the NSW Excavation Work Code of Practice July 2015.

# Weights of various gases

Gas	Specific Gravity - SG -
Hydrogen	0.0696
Helium - He	0.138
Methane - CH4	0.5537
Natural Gas (typical)	0.60 - 0.70
Carbon monoxide - CO	0.9667
Air	1.000
Hydrogen sulphide - H2S	1.1763
Carbon dioxide - CO2	1.5189
Propane - C3H8	1.5219
Ozone	1.660
Butane - C4H10	2.0061
Pentane	2.487
Sulphur Hexafluoride` (SF6)	5.114

Lighter than  
air



Heavier than  
air



# Managing site conditions

## L1ASP & CC Responsibility



# Examples of mechanical protection

## Fireproof mats

Welding, Cutting, Grinding, Brazing & Other 'Hot' Work'

Annexure A: Suggested uses for 1 metre square welding cloth in trench



Use this method when mains is against the trench wall near bottom



Physical barrier to separate assets - avoiding damage or inadvertent contact



# Moving Forward

SafeWork NSW has engaged with Endeavour Energy and Jemena to form a working group to further understand the risks and control moving forward when hot works are performed in trenches that contain shared assets.



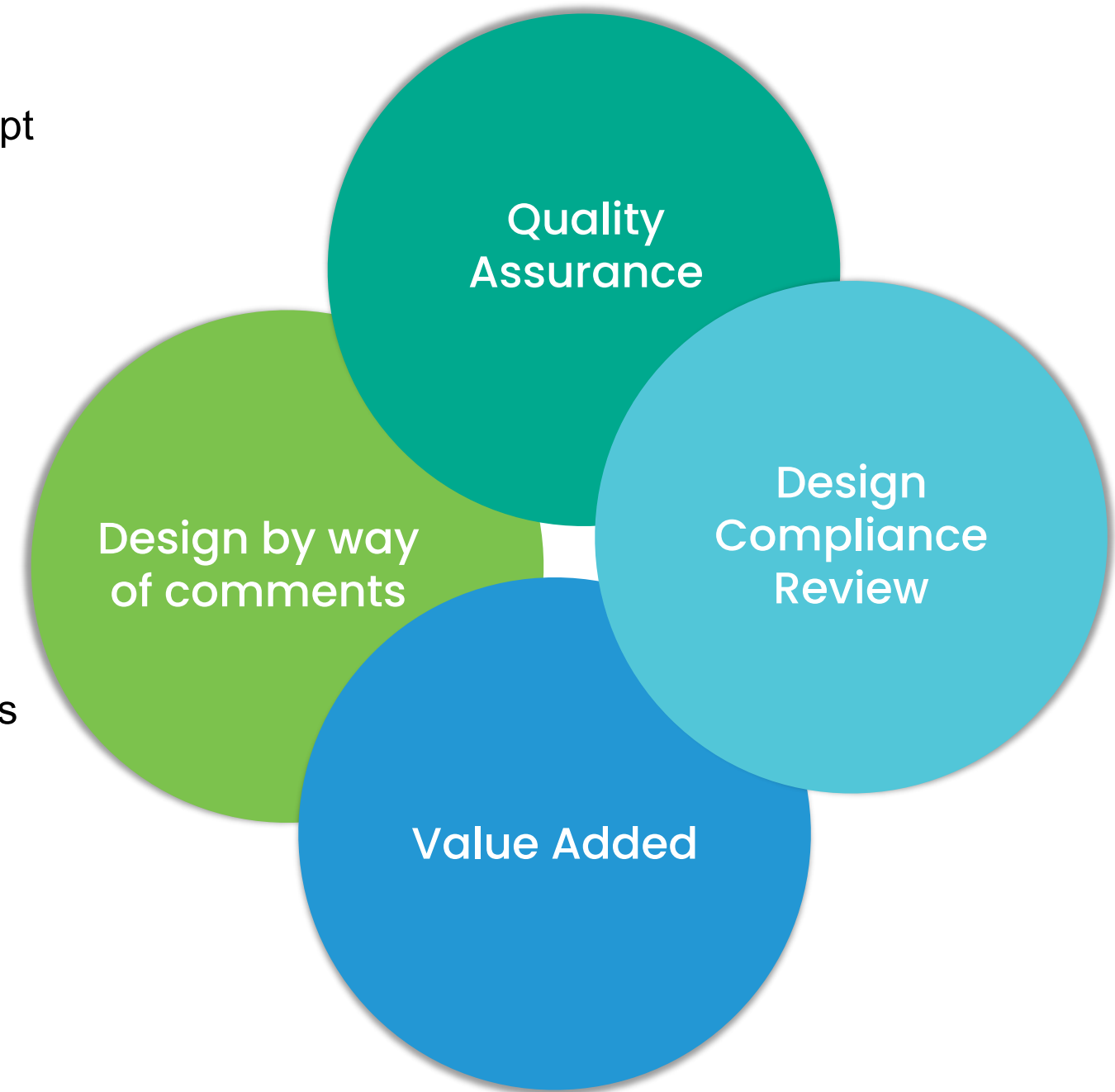
# Questions

# ASP Submission Validation App

**Jonathan Lei**  
Customer Connections Manager

# Why we built the App

- Continuation of the journey of minimum design requirements concept
- Opportunity to embrace technology and AI in our design review process
- Start small – automate TAL submission checks as proof of concept
- TAL chosen because:
  - Known pain point
  - Accuracy of Asset Data plays an important role in critical business process
  - Incorrect data can cause ADMS model discrepancies and outage risks - project delivery risk
  - Our vision to reduce admin tasks, create capacity for engineers to perform high-value work, and improve customer service



# What the App is & what does it do

- AI assistant for Customer Network Engineers (CNEs)  
Create design submission and upload design documents
- Runs automated checks to support ASP design and TAL submission review
- Key features: extract information from design submission documents and perform across check and mandatory fields checks.
- Highlights issues and critical errors, provide indications of quality of TAL submission.
- Help our engineers to work more efficiently and smarter.

## Results: simple pillar 2 (#4)

### Result Summary



27 of 27 tests passed (20 checks with information)

✓ All mandatory tests passed. Click Finalise to continue.

### ✓ Reading asset numbers-POLE SCHEDULE TABLE

#### Compare supply requirements in Design Brief against Design Drawing

Search for the method of supply requirements from the Design Brief in the Design Drawing and [View details](#) ✓

#### Method of Supply requirements in Design Brief

Extract the supply requirements from the Design Brief, including HV, LV, SL, Earthing, Easements, and any substation requirements. [View details](#) ✓

#### Compare supply funding arrangements in Design Brief against Design Drawing

Search for the funding arrangement outlined in the Design Brief within the Design Drawing and [View details](#) ✓

## ASP Submission Validation

Search...

+ Create New

### ASP Submissions

All ▾ 15 results

Submission ID	Project name	Type	Location	Submitted	Result Summary
4	simple pillar 2		<a href="#">Hoxton Park 2</a>	31 Jul 2025	100% Passed <div><div></div></div>
3	URS28712 COL Pillar		<a href="#">Hoxton Park</a>	31 Jul 2025	82% Passed <div><div></div></div>
2	Pole sub PM Pole Pillar SL		<a href="#">Hoxton Park</a>	31 Jul 2025	76% Passed <div><div></div></div>
1	Poles		<a href="#">Hoxton Park</a>	31 Jul 2025	100% <div><div></div></div>

# Cross check example

Submission #2

Reading asset numbers-POLE SCHEDULE TABLE

AI to read the asset numbers for new poles in the POLE SCHEDULE TABLE is consistent with TAL [View details](#) and the rest of design drawing.


1 entries failed. 1 missing in Pole Schedule Table: 1000757.

Pole number 1000757 exist in TAL but is missing in pole schedule table. This asset number may not be used in the design.

J	K	L	M
Poles			
Functional Location	POLE01000756	POLE01000757	POLE01000758
Reference Functional Location	POLEPOLE0001	POLEPOLE0001	POLEPOLE0001
Flag for Deletion (Mark as 'X')			
Proposed Removed Equipment Number			
Assembly			
Functional Location	ASSM00711654	ASSM00711655	ASSM00711656
Reference Functional Location	ASSMPOLE0001	ASSMPOLE0001	ASSMPOLE0001
Flag for Deletion (Mark as 'X')			
ASSM Plate Number (Sort Field)			
Superior Functional Location	POLE01000756	POLE01000756	POLE01000757
FLOC Construction Type	HV OH Assembly - Crossarm Type - Bare	LV OH Assembly - Xarm Type - ABC	HV OH Assembly - Crossarm Type - Bare
FLOC Technical Object Type			
Location	Nowra Field Service Centre	Nowra Field Service Centre	Nowra Field Service Centre

FIELD POLE NUMBER		LANTERNS					CONSTRUCTION				HOLE		POLE									
NEW	EXISTING	NEW	REMOVE	EXISTING	REPLACE	BRACKET MOUNTING HEIGHT (m)	SPAN LENGTH	LINE DEV DEGREES	HV	LV	DIA mm	DEPTH m	TYPE	STAY	FOOTING	RELOCATE	REPLACE	NEW	EXISTING	REMOVE	NUMBER	
1000778	301163				X		-	-		A05	600	1.85	M8C-12.5-16/8		C		X				48	
1000758	301162				X		64	29		A03 + A03	600	1.85	M9C-12.5-24/12		C		X				47	
	BT058						24	52		A03	EX	EX	12.5/8N						X		46	
	891738			X			53	-	B21 (EX)	A01 + A05	EX	EX	M8C-12.5-16/8						X		45	
1011504	802355						48	-		LUGOH + B05	600	1.85	M6C-11-24-12				X				44	
	899768																			X	43	
	811119																			X	42	
	BT119																			X	41	
	891740			X			44	2	B21 (EX)	A03	EX	EX	M8C-12.5-16/8						X		40	
1000777	BT074						42	-	HUGOH + B25	LUGOH + A05	900	2.00	14/12N		C		X				39	
	BT067																			X	38	
	887327																			X	37A	
	BT072																			X	37	
	830019																			X	36	
	811869																			X	35	
	811868																			X	34	
	8BV137																			X	33	
	896729																			X	32	
1001490							-	-	HREC-BB (DRW 332022) (11kV AUTO RECLOSER NORJA TYPE OSM 15)		600	1.85	12.5/8N		C			X			31	
1000772							-	-	HUGOH + B25	LUGOH + A05	900	2.00	14/12N		C			X			30	
1000771							30	4	B24	A03	900	1.85	M9C-12.5-24/12		C			X			29	
1000770							64	10	B24	A03	900	2.00	M12C-12.5-40/20		C			X			28	
1000769							28	3	B24 + LSUB-BB (DRW 240931)	B05 + A05 + LSUB-AB (DRW 240933)	900	1.85	M9C-12.5-24/12		C			X			27	
1000768		X				B4 10.5	20	10	B23 + B25	A03 + A05	900	1.85	M9C-12.5-24/12		C			X			26	
	8BV138																			X	25	
1000767							18	-	HUGOH + B25	A01 + LUGOH	900	2.00	14/12N		C			X			24	
1000766							79	10		A01	900	1.70	M6C-11-24-12		C			X			23	
1000765							76	-		A01	900	1.70	M6C-11-24-12		C			X			22	
1000764							71	-		A05	900	1.70	M6C-11-24-12		C			X			21	
	853321																			X	20	
	8BV133																			X	19	
	802682																			X	18	
	802929																			X	17	
	8BV129		X																	X	16	
	811198																			X	15	
	8BV128																			X	14	
	8BV093																			X	13	
	811197																			X	12	
	8BV094																			X	11	
1000763							60	-		A05			M8C-12.5-16/8		C			X			10	
1000762							60	-	HUGOH + B25	LUGOH + A03	900	2.00	14/12N		C			X			9	
	842529																			X	8	
1000761							59	1	B23 + HSUB (DRW 240931)	A03 + LSUB (DRW 240933)	900	1.85	M9C-12.5-24/12		C			X			7	
	807573																			X	6	
1000760	842530						71	24	B23 B25	A03	900	1.85	M9C-12.5-24/12		C			X			5	
	766252																			X	4	
1000759							36	11	B24	A03	900	2.00	M12C-12.5-40/20		C			X			3	
1000756							52	30	B24	A03	900	1.70	M6C-11-24-12		C				X		2	
	8BV094						30	-	B24	A03	EX	EX	EX						X		1	

# Format check example



Validation of "POLE" - Assembly Number detail

[View details](#) ^

Ensure that the Superior Function Location matches the Functional Location in the top tab

1 entries failed. Assemblies without corresponding data: {'Assembly - Functional Location': 'ASSM00746983', 'Assembly - Superior Functional Location': 'POLE1011504'}

Poles			
Functional Location			
Reference Functional Location			
Flag for Deletion (Mark as 'X')			
Assembly			
Functional Location	ASSM00718097	ASSM00720925	ASSM00746983
Reference Functional Location	ASSMPOLE0001	ASSMPOLE0001	ASSMPOLE0001
Flag for Deletion (Mark as 'X')	X		
ASSM Plate Number (Sort Field)			
Superior Functional Location	POLE01001237	POLE01001490	POLE1011504
FLOC Construction Type	LV OH Assembly - Xarm Type - ABC		
FLOC Technical Object Type			
Location	Nowra Field Service Centre	Nowra Field Service Centre	Nowra Field Service Centre
Network General Characteristics			
Urban	No		
FLOC Characteristics			

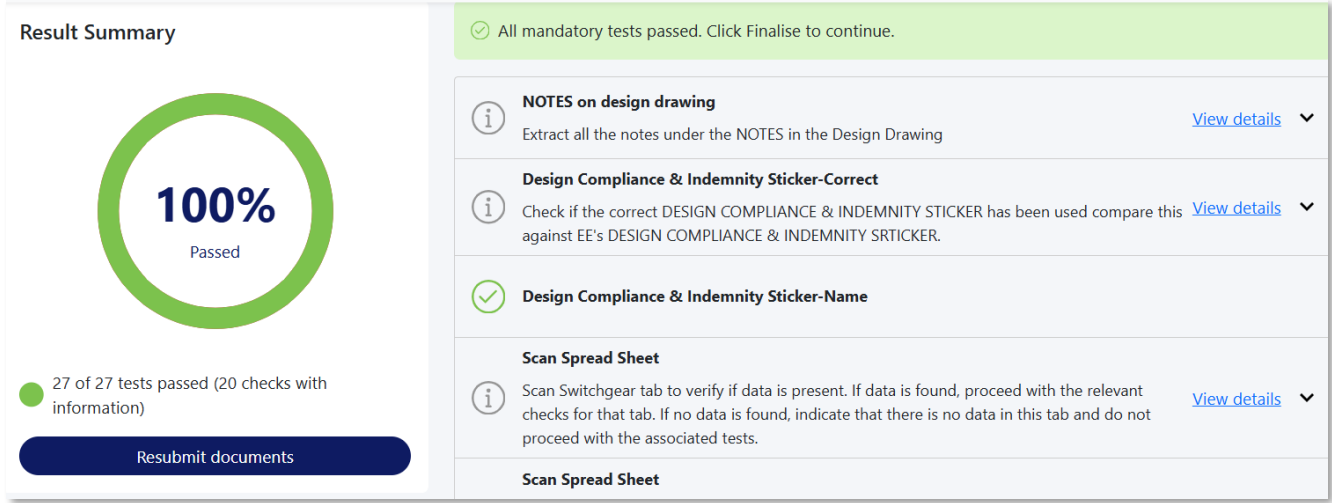
This superior functional location does not correspond to the Functional Location on the top

Poles	
Functional Location	POLE01011504
Reference Functional Location	POLEP E0001
Flag for Deletion (Mark as 'X')	
Pole Plate Number (Sort Field)	PL1011504
Superior Functional Location	
FLOC Construction Type	
FLOC Technical Object Type	Structure Pole
Location	Nowra Field Service Centre

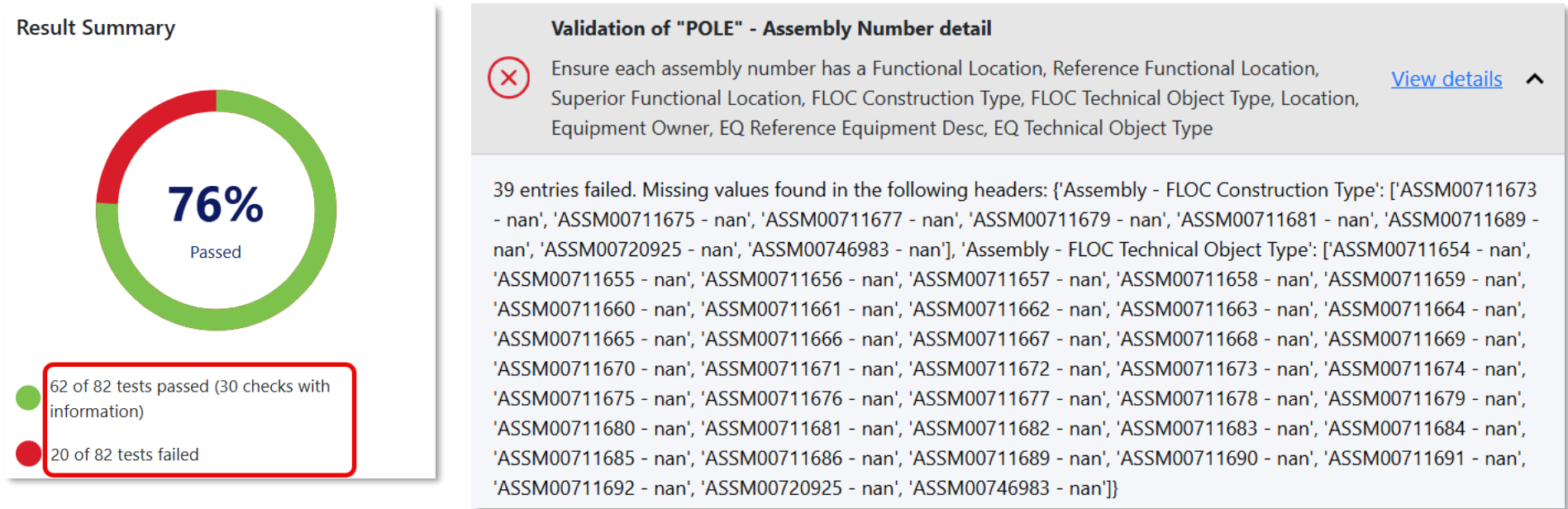
"0" infront of "1" is missing

# Use case and best practices

## Case 1 -100%

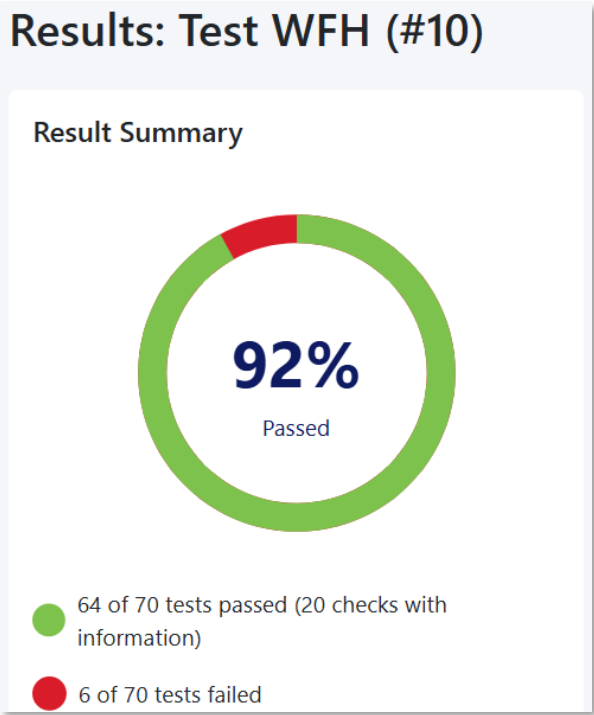


Case 2 – 76% pass, 62 of 82 tests passed, 20 of 62 failed, repeating errors and multiple incomplete or incorrect data.



# Use case and best practices

Case 3 – 92% pass, 64 of 70 tests passed, 6 of 62 failed, No repeating errors or multiple incomplete data, minor individual errors



<b>Validation of Column "SWITCHGEAR" - BUSBAR</b>	
<div><div></div></div>	<div>Check the Fuctional Location Numbers against the design drawing omitting all the letters and numbers before the first digit ie LVDG00165863 or HVDG00165863 would only be shown as 165863 in the design.</div> <div><a href="#">View details</a> ^</div>
FLOC numbers not found in Design Drawing: 21096	
<b>Validation of Column "HV_LV Switches" -PM (GND) Substations -Equipment</b>	
<b>Characteristics check for LV Switches:</b>	
<div><div></div></div>	<div>Check and ensure that the EQ Equipment Description is slected correctly. For switches with prefix SWITXXXXXXXX its "Gen, Switch Fuse - LV",for switches with prefix DSSWXXXXXXXX its "Gen, Isol/Disc - LV - GD"</div> <div><a href="#">View details</a> ^</div>
2 entries failed. ID:SWIT00248791. Value:Gen, LV Links. the EQ Reference Equipment Desc is incorrect. ID:SWIT00248792. Value:Gen, LV Links. the EQ Reference Equipment Desc is incorrect.	

## What ASP3s can expect

- ASPs shall continue quality assurance before submission
- No detailed review of TAL will be performed by CNEs for poor quality TALs submitted for design certification.
- We'll provide guidance via TAS & TAL guidelines & technical bulletins relevant to the requirements and examples to support your quality assurance.
- For minor but critical issues in TAL, it is easier for us to detect now, we may notify you of details, send it back or fix it ourself whichever is practical and efficient.

## Future vision

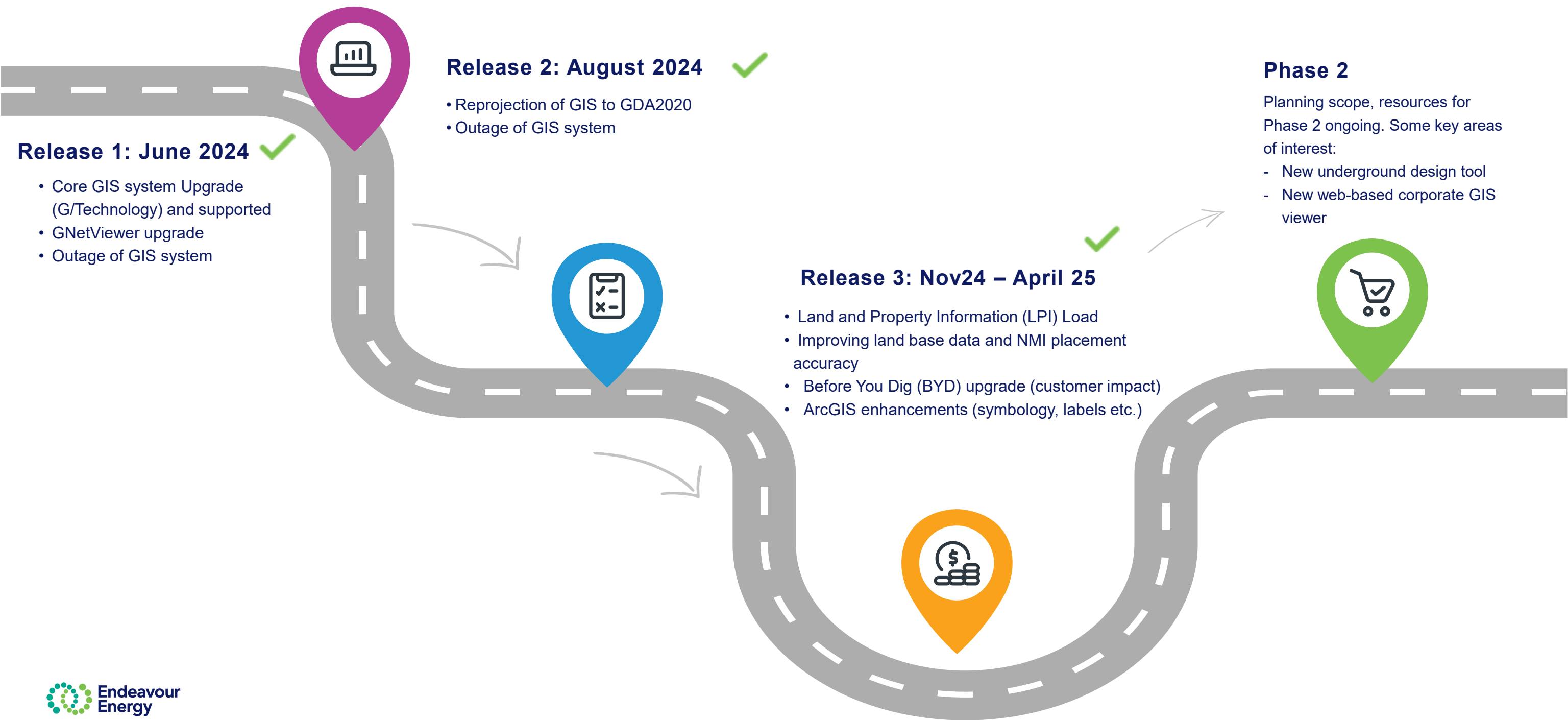
- Expand scope beyond TAL review into other administrative checks on design submission
- Long-term: tool may face ASPs directly for pre-submission checking
- Continuous improvement & learning
- Continue with other initiatives that will eliminate the admin burden on ASPs

# Questions

# GIS & systems update

**Matthew Morgan**  
GIS Operations Manager

# GIS Upgrade Project Journey Map



# Before You Dig (BYD) Changes – April 2025

## BYD – Questions and Answers



### What are we doing with BYD?

BYD is a third-party website that provides customers in our network (and across Australia), important information from all utilities about underground assets to ensure the safety of our customers. We are **simplifying underground asset information** provided to all customers who submit a request via the BYD website. We are also updating the BYD software so it is supported and secure. Currently, we provide highly detailed information of our underground asset network to customers who submit a BYD request. In some areas we also provide field book attachments as our underground network is not captured in the GIS. The information they receive is complex and can be difficult to understand. We will be providing easy-to-read plans that contains the key information when digging around our underground assets and include a buffer zone, for safety purposes. This is consistent to what we do today for our 'Look Up and Live' service.

### Will any internal process change?

1. If customers call the contact centre, the same processes regarding BYD enquiries remain unchanged (for example, via the internal BYD contact number)
2. Members of the capture support team will continue to support BYD enquiries and request exceptions
3. The connections team may receive requests for Field books (drawings) from ASPs as a result of the change, however, the process on how they are obtain this information has not changed. ASPs who have submitted a BYD request can also

### I'm an internal staff member, can I get access to our Field Books?

Yes, you are able to access Field Books in content server, as is the case now. As part of this release, there will also be no changes to our GIS systems ArcGIS or GNetViewer, where you can view our network.

### Why are we making changes?

- To improve the quality of responses to our customers and to simplify the look/feel of the information provided.
- To improve safety of our underground network and all customers in our network
- Back-end systems are outdated and unsupported, posing IT security risks. We will ensure our BYD internal back-end systems are up-to-date and supported moving forward.
- Improve the quality of the responses to our customers by simplifying the look and feel of the information provided (in turn, improving safety of our network and people).
- Reduce internal back-end teams manually managing many request exceptions due to the area size requested and missing Fieldbooks/WAEs.

### If ASPs need detailed drawings (Field Books), what do they do?

If they have lodged a BYD enquiry, the process for ASPs to request Field books **has not changed**. They will need to complete the "Field Book Request Form for Accredited Service Providers" **FAD2015** that is on the ASP portal and return it to the email address on the form.

## When did the BYD changes coming into effect?



April 2025



## Key Messages



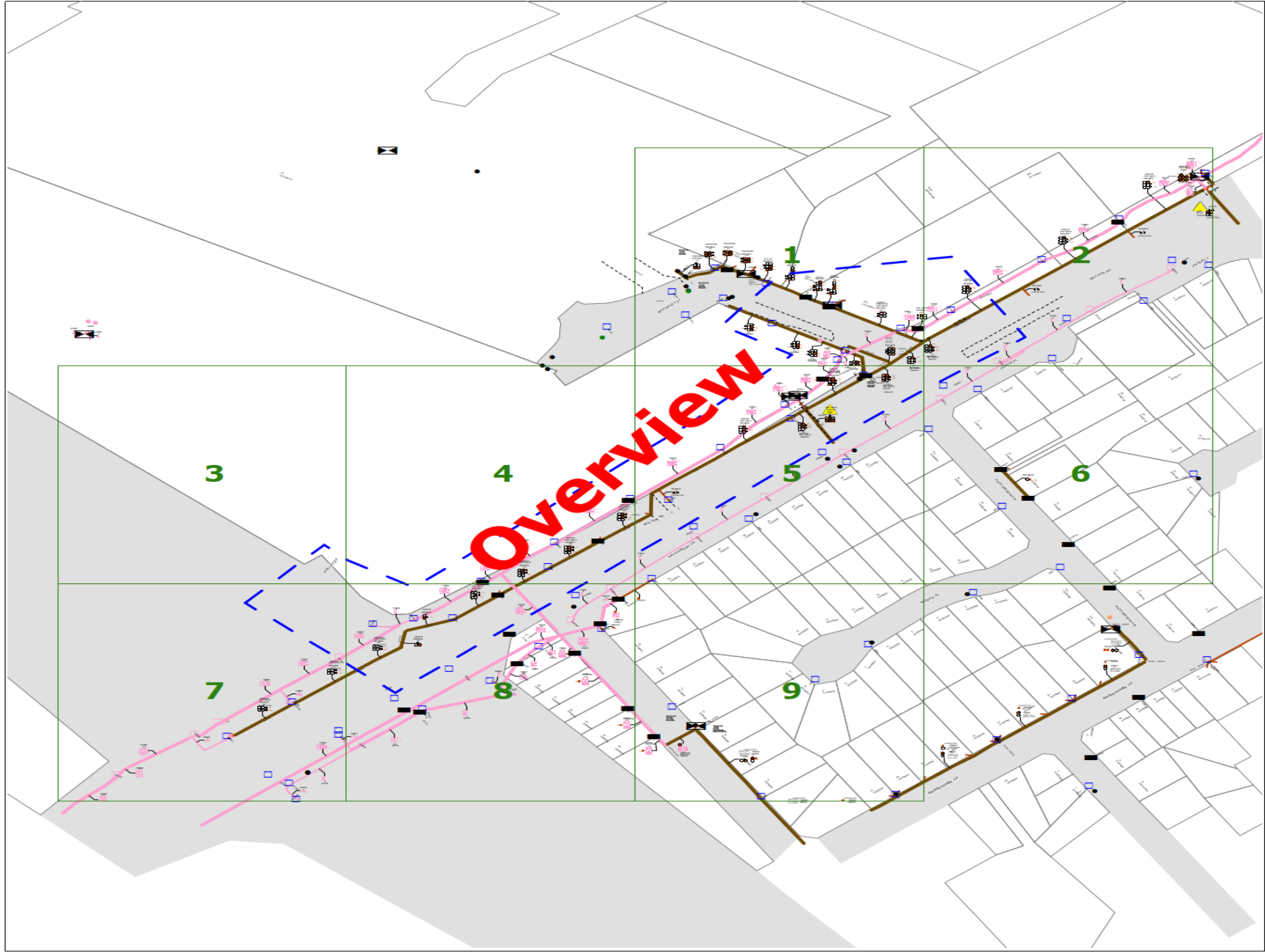
- Currently, the information we provide to customers via BYD about underground assets in our network is extensive and hard to read, which can compromise the safety of our customers
- We are simplifying the information, look and feel of the documentation we are providing customers in our network about our underground assets via Dial Before You Dig
- The simplification of information aims to improve the safety of our customers, people and asset network
- We are complying with legislative requirements under the SOCI Act

## Key Contacts



**Matthew Morgan**  
GIS Operations  
Manager

# Existing BYD Response



**WARNING**

- All electrical apparatus shall be regarded as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures. Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (20) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice.

**INFORMATION PROVIDED BY ENDEAVOUR ENERGY**

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

**DISCLAIMER**

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in any plan is as accurate as possible at the time of installation, the location of underground assets depicted on a plan is approximate and it will accept no liability for inaccuracies in the information shown on such plans.

**WARNING**  
THIS EXCAVATION IS IN THE VICINITY OF  
ENDEAVOUR ENERGY TRANSMISSION, PILOT,  
COMMUNICATION OR FIBRE OPTIC CABLES.  
PLEASE RING 9853 7121 or MOB. 0407 468 626  
10 WORKING DAYS BEFORE COMMENCING WORK

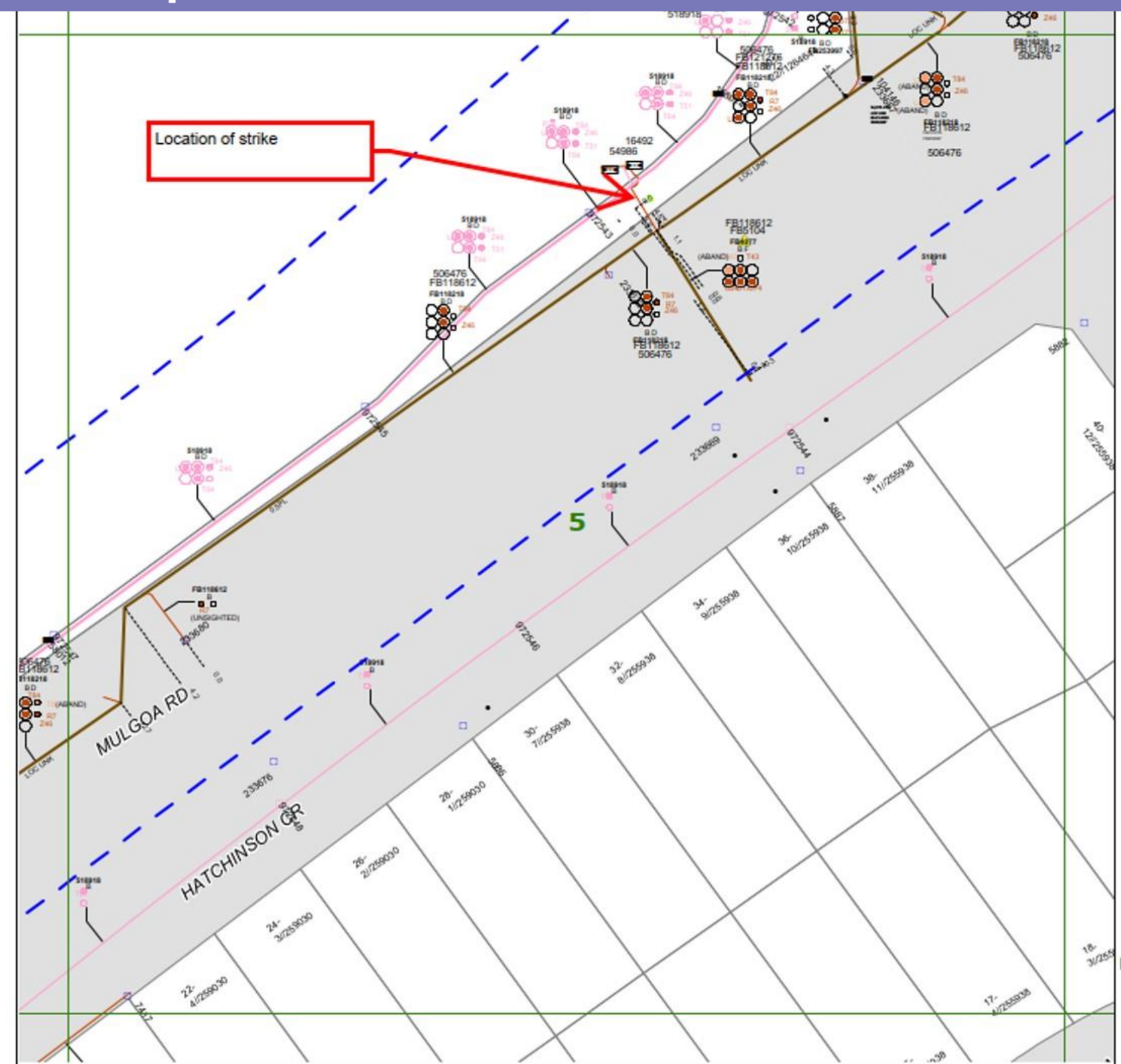
- or ■ Street light column
- ▬ Padmount substation
- or ■ Overground pillar (O.G.Box)
- ⊠ Underground pit
- ▬ Duct run
- ▬ Cable run
- ⊙ Typical duct section
- ▲ Asbestos warning



**NOT TO SCALE**

BYDA Sequence No.:	249614077
Issued Date:	15/01/2025

# Existing BYD Response



### WARNING

- All electrical apparatus shall be regarded as live until proved de-energised. Contact with live electrical apparatus will cause severe injury or death.
- Underground assets may be congested at the approach to bridges and other structures. Typical asset depths and alignment may vary substantially, rising and falling sharply and at much shallower depths than elsewhere as they are channelled into shared allocated spaces on bridges and other structures. Additional precautions and underground asset location methods will be required in proximity to bridges and other structures.
- In accordance with the Electricity Supply Act 1995, you are obliged to report any damage to Endeavour Energy Assets immediately by calling 131 003.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty (20) working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be made available at the worksite where excavation is to be undertaken in either printed or electronic format. If the plans are in an electronic format, they must be in a format visible on a screen size 10 inches or greater. Plans must be reviewed and understood by the crew on site prior to commencing excavation.
- Non-destructive water excavation must be operated at or below 2000PSI. Any operation exceeding 2000PSI must be classed and treated as a destructive excavation practice.

### INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

### DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in any plan is as accurate as possible at the time of installation, the location of underground assets depicted on a plan is approximate and it will accept no liability for inaccuracies in the information shown on such plans.

**WARNING**  
THIS EXCAVATION IS IN THE VICINITY OF  
ENDEAVOUR ENERGY TRANSMISSION, PILOT,  
COMMUNICATION OR FIBRE OPTIC CABLES.  
PLEASE RING 9853 7121 or MOB. 0407 488 626  
10 WORKING DAYS BEFORE COMMENCING WORK

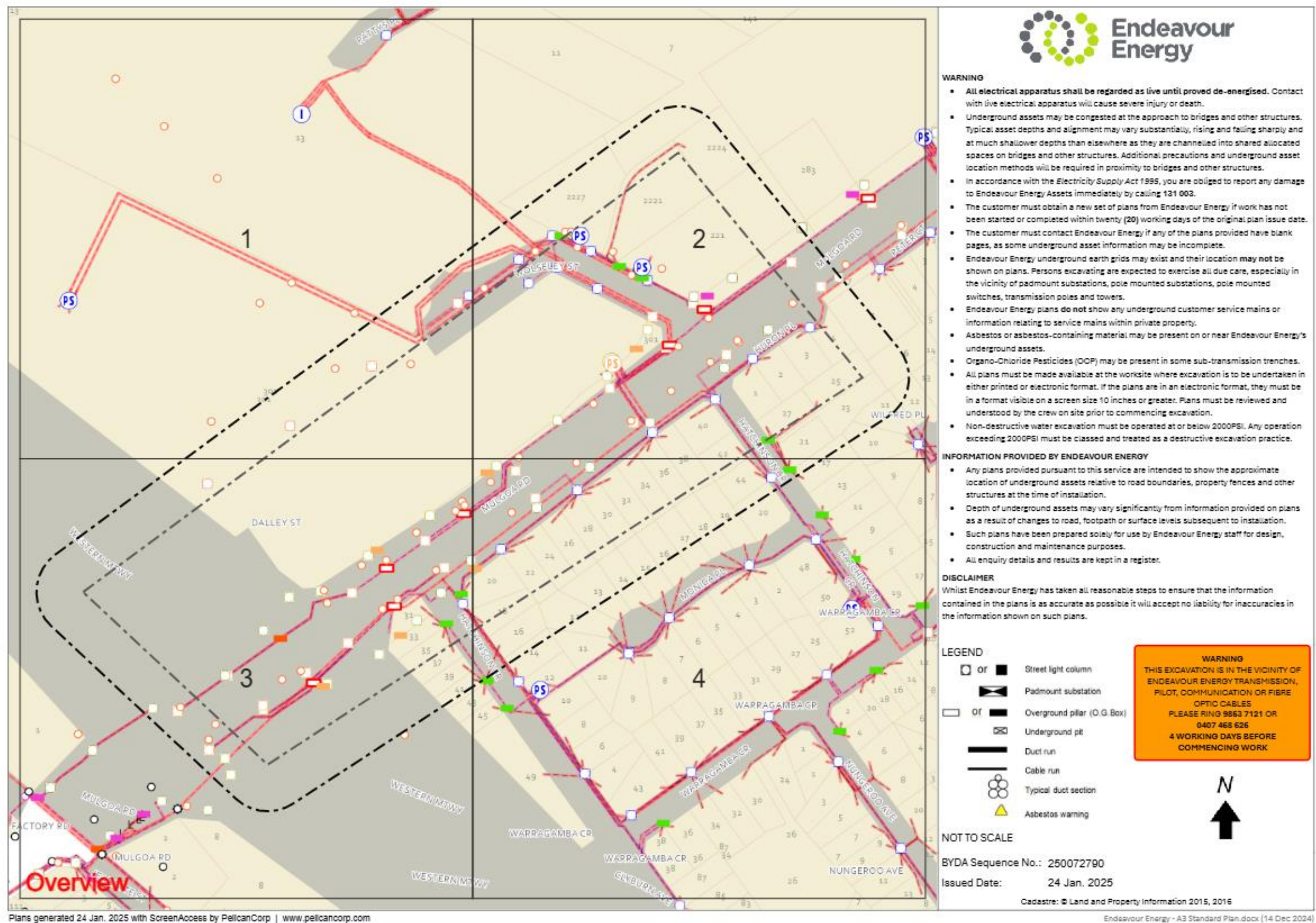
- OR ■ Street light column
- ▭ OR ▩ Padmount substation
- ▭ OR ▩ Overground pillar (O.G.Box)
- ▭ OR ▩ Underground pit
- Duct run
- Cable run
- ⊗ Typical duct section
- ▲ Asbestos warning



NOT TO SCALE

BYDA Sequence No.:	249614077
Issued Date:	15/01/2025

Cadastre: © Land and Property Information 2015, 2016



# ESRI Improvements



# ASPGIS Portal

## Home Page Featured



**ASP ArcGIS Application 1.1**



**EnviroGIS**

This is the home page of your ArcGIS Organization. [You can easily change this page](#) with your own logos, background image and many other things.

Additionally, you can populate this home page with a collection of featured items such as Web Maps and Web applications to highlight the most useful GIS resources in your organization.



### Layer List

## Layers

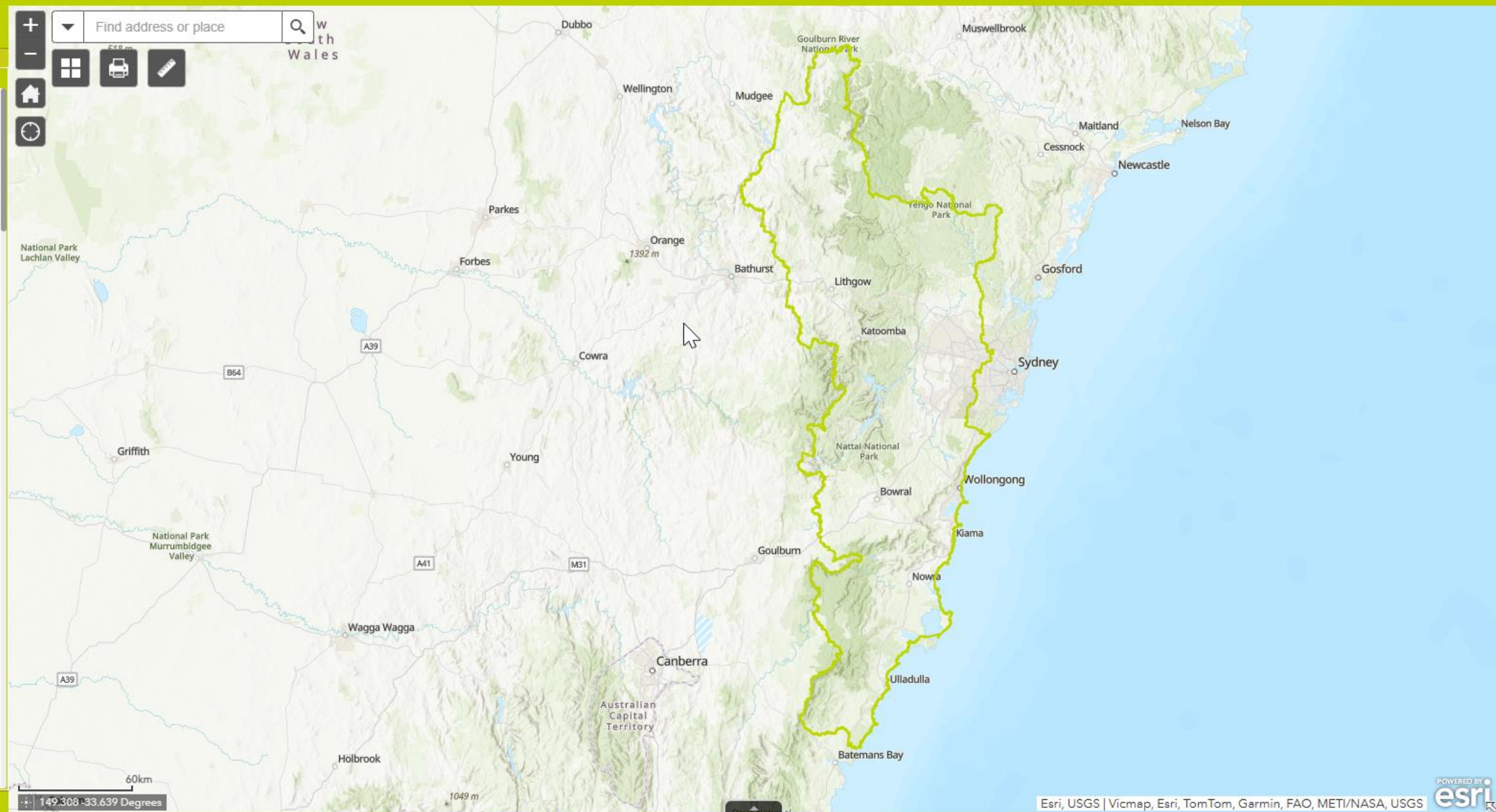
- ▶ ☒ Supply Point
- ▶ ☒ TR Substation
- ▶ ☐ TR Switching Stations
- ▶ ☒ Zone Substation
- ▶ ☐ HV Switching Stations
- ▶ ☐ Distribution Substation
- ▶ ☐ Streetlight
- ▶ ☐ Pole
- ▶ ☐ Pillar
- ▶ ☐ Column
- ▶ ☐ Tower
- ▶ ☐ HV Feeder by Colour
- ▶ ☒ TR Conductor
- ▶ ☐ HV Conductor
- ▶ ☐ LV Conductor
- ▶ ☐ SL Conductor
- ▶ ☐ LV Service Conductor



Find address or place



 **W**  
**th**  
**Wales**



# Questions

# EIA - from paper to PEGA

**Gina Pavlovic**  
Head of Sustainability

# Agenda



**IMPORTANT ENVIRONMENTAL UPDATES**



**ENVIRONMENTAL IMPACT  
ASSESSMENTS (EIA)**



**NEW EIA TOOL**



**QUESTIONS & ANSWERS**



# Waste Management



**First NSW Waste and Circular Infrastructure Plan released**



**Construction company fined \$200,000 for providing false information to the EPA**



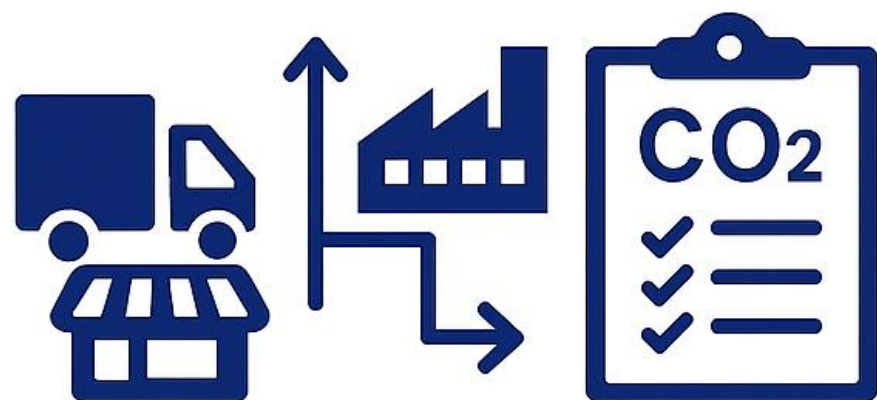
**New environmental name and shame register**



# Emissions

**Key priorities are data collection and carbon abatement initiatives**

Complete full scopes 1,2 3  
emissions reporting



Expand identification  
and prioritisation of  
data management





# Pollution

Many common offences, such as committing water pollution or non-compliance with a clean-up notice, now have fines of:



## Individuals

\$15,000 for a first offence

\$22,500 for a second offence



## Corporations

\$30,000 for a first offence

\$45,000 for a second offence

Penalty notice amounts equal when issued by the EPA or a local council



# Environmental Approvals

## **Environmental Planning and Assessment Act 1979**

The Environmental Planning and Assessment Act 1979 details the system of environmental planning in NSW.

For best practice environmental management please refer to Endeavour Energy's Environmental Guidelines Handbook available on ASP Portal.

Key considerations include:

- Defines development as the use of land, construction, demolition and other activities
- Cumulative impacts that may be directly or indirectly related to the proposed activity must be assessed
- Analysis of potential impacts throughout the project lifecycle (including site preparation, construction, operations and decommissioning where appropriate)

## **Environmental Guidelines Handbook**





# EIA – why is this important?

- Defence to prosecution under various environmental legislation
- EPA regulatory action *Noise* complaints, unapproved tree removal, illegal development
- Harming or desecrating an Aboriginal object is an offence under the National Parks & Wildlife Act 1974.



Maximum penalties now include imprisonment (2 years), personal fines of up to \$550,000. In the case of a corporation, the maximum fine is up to \$1.1M



Workers sliced through the rock (circled), causing irreparable damage.



# EIA Planning Process Table

(EMS0001 Figure 1, page 11)

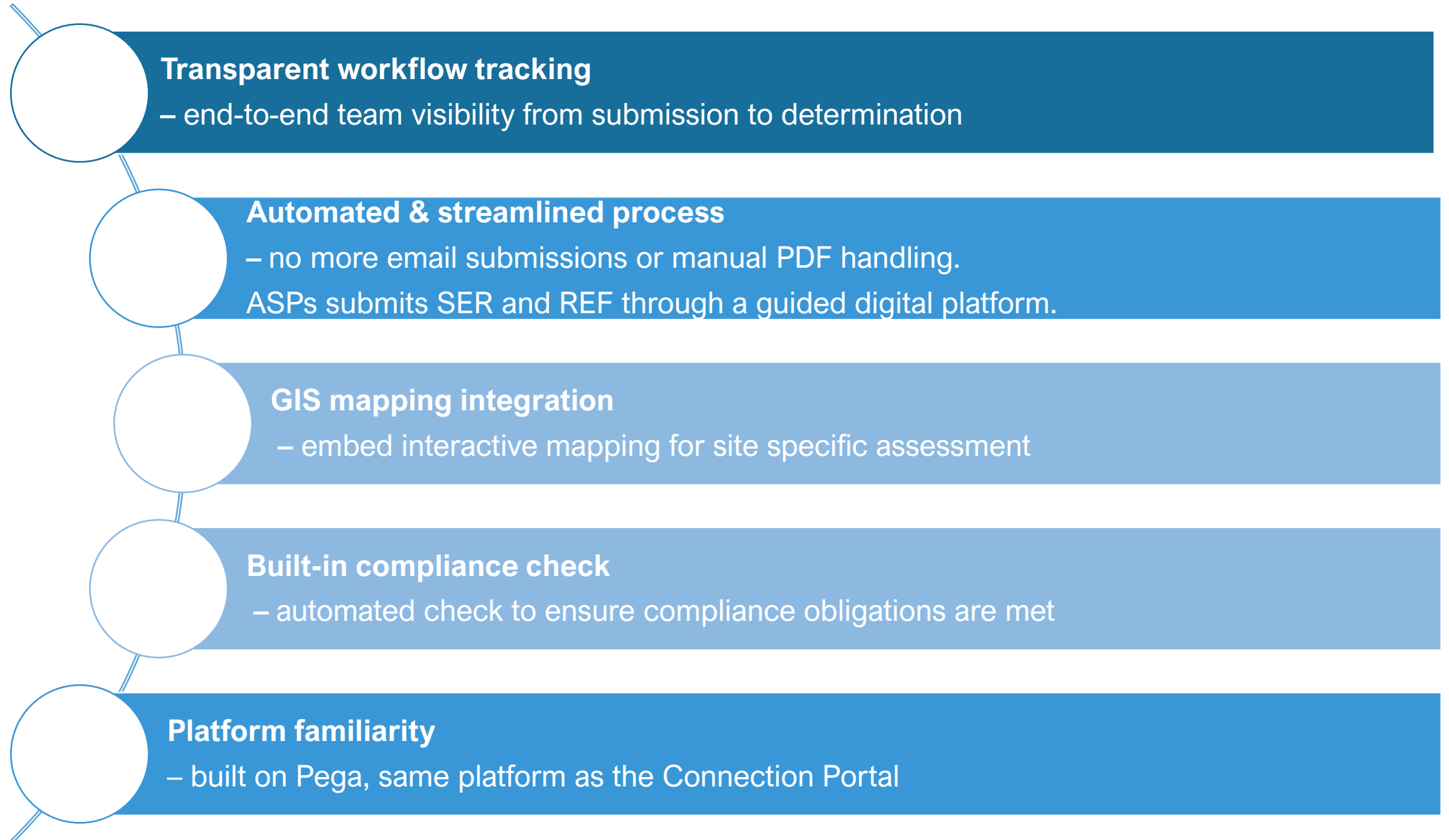
Classification of proposed activities	CLASS 1 Not considered a development or activity e.g., demolition of temporary structure	CLASS 2 <b>EXEMPT DEVELOPMENT</b> Generally, includes routine repairs and maintenance of existing assets less than 66kV, or emergency works	CLASS 2 <b>DEVELOPMENT APPLICATION (DA)</b> Generally, includes new depots and office buildings, or electrical works carried out by a third-party DA submitted to Council.	CLASS 3 <b>SER</b> Generally, includes new minor works for distribution lines and powerlines. Design drawings are not complex	CLASS 4 <b>REF</b> Generally, includes new transmission or feeder lines, substations, switching stations, large battery sites. Design drawings are more complex	CLASS 5 <b>REF &amp; Species Impact Statement (SIS)</b> Involves significant impact to threatened species	CLASS 6 <b>EIS</b> Generally major projects and/or projects that are likely to significantly affect the environment. Declared to be State Significant Infrastructure
Level of Environmental Impact	N/A	Negligible	Determined during DA Assessment	Minor and neither extensive or complex	Beyond minor, or extensive/complex but not likely to significantly affect the environment	Likely to significantly affect threatened species, where significant effect on threatened species is the only significant impact	Likely to significantly affect the environment
Type of EIA required.	None	None/EXEMPT	DA	SER	REF	REF & SIS	EIS
Planning Pathway under EP&A Act	N/A	s1.6 of EP&A Act, T&I SEPP s2.46	Part 4	Part 5	Part 5	Part 5/BC Act	Part 5.2
Determining Authority	N/A	N/A	Local Council	Endeavour Energy	Endeavour Energy	Endeavour Energy with concurrence from Environment and Heritage Group (EHG) of DPE	Minister for Planning and Public Spaces
Project Requirements	N/A	<ul style="list-style-type: none"> <li>Environmental Guidelines Handbook</li> <li>Emergency Works Procedure</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Guidelines Handbook</li> <li>Permits and licences (as applicable)</li> <li>SEE</li> <li>DA Approval Conditions</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Guidelines Handbook</li> <li>Permits and licences (as applicable)</li> <li>SER Approval Conditions</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Guidelines Handbook</li> <li>Permits and licences (as applicable)</li> <li>REF Approval conditions</li> <li>CEMP</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Guidelines Handbook</li> <li>Permits and licences (as applicable)</li> <li>REF &amp; SIS Approval conditions</li> <li>CEMP</li> </ul>	<ul style="list-style-type: none"> <li>Permits and licences (as applicable)</li> <li>EIS Approval conditions</li> <li>CEMP</li> </ul>



# The EIA Tool - Is a 'One Stop Shop' for all Enviro Activity

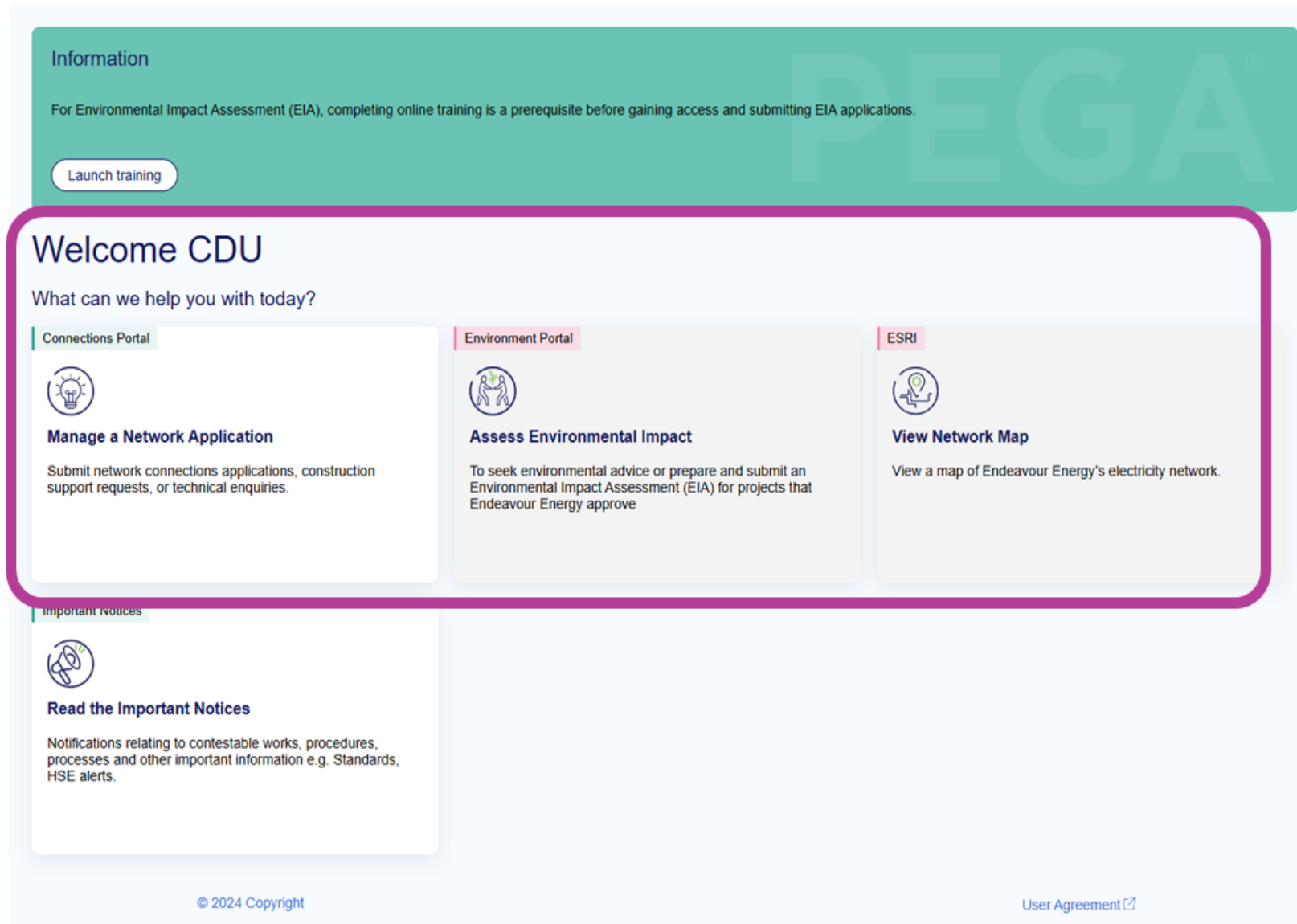


## Environmental Impact Assessment (EIA)





# The EIA Tool - how do ASPs get access?



## For ASPs with existing access to the Connections Portal

- You will be sent an email with details on how to register for aXcelerate
- You will complete compulsory EIA eLearning in aXcelerate
- From EXPECTED 30 August—any ASP who has completed the training will gain access to the new EIA tool.

If you have not received an email regarding aXcelerate access prior to 30th August, please contact **[cwadmin@endeavourenergy.com.au](mailto:cwadmin@endeavourenergy.com.au)**

## For new ASPs without existing access to the Connections Portal:

- The EIA tool and aXcelerate access will be treated the same as other system access and be automatically applied for when you create a log in in the Connections Portal.

## Support

- For questions about the EIA submission process, please contact the Customer Network Engineer (CNE) assigned to your project
- For technical issues with the platform, please log an incident via the Enterprise Customer Portal



# The EIA Tool - Training and User Guides



## User Guide – New User: Self-Registration & Logging In

### About this guide

Self-service platforms such as the [Connections Portal](#), [Contractor Booking System](#) and [Environment Portal](#) are accessed via the Endeavour Energy [Enterprise Customer Portal](#)

This guide covers the following topics:

- **register** as a **new user** on the Endeavour Energy [Enterprise Customer Portal](#)
- **set up your profile** to access the relevant platform / portal e.g. [Connections Portal](#), [Contractor Booking System](#), [Environment Portal](#)

### How to use this guide

Each topic has a brief **SUMMARY** of the steps and then **DETAILED INSTRUCTIONS** with screenshots

Summary of the steps



Detailed instructions



## User Guide – New User: Self-Registration & Logging In

### Topics in this guide

[Click to jump to the relevant page](#)

#### REGISTER AS NEW USER

Self-registration steps to **register** as a **new user** on the [Enterprise Customer Portal](#)

**SUMMARY**

**DETAILED INSTRUCTIONS**

#### SET UP PROFILE

For access to -> [CONNECTIONS PORTAL](#)  
For ASP 3 to request access to -> [ENVIRONMENT PORTAL](#)

When you have registered and logged in to the Enterprise Customer Portal, the next step is to **set up your profile** to enable access to the [Connections Portal](#)

For an [ASP 3](#) this will also trigger a request for access to the [Environment Portal](#)

**SUMMARY**

**DETAILED INSTRUCTIONS**

#### SET UP PROFILE

To request access to -> [CONTRACTOR BOOKING SYSTEM](#)

When you have registered and logged in to the Enterprise Customer Portal, the next step is to **set up your profile** to request access to the [Contractor Booking System](#)

**SUMMARY**

**DETAILED INSTRUCTIONS**

[Click to jump to the relevant page](#)

# Questions

# General Q&A

**Ashwin Prasad**  
Customer Connections Experience Manager

**Jonathan Lei**  
Customer Connections Manager

If you have a question, please “raise your hand” through Teams and we will endeavour to get through as many questions as we can.

Alternatively, please write your question in the Q&A chat and we will make sure we get to it at a later date

# Q & A

Question	Answer
<b>For the NSW government portal – is it just the installer needing to do extra paperwork or do they need to return to site for commissioning/testing?</b>	The portal replaces the AEMO portal requirement. Most data is prefilled, so only an administrative step is needed. Commissioning has an onsite component, but it can be triggered remotely. If setup issues occur (such as CTs being installed incorrectly), the installer may need to return to site.
<b>What are the actions needed from installers regarding flexible exports and emergency backstops?</b>	Once the system is commissioned in the portal, nothing further is required from the installer. Signals are sent to the house. Flexible exports operate dynamically every half hour, while emergency backstops are event-based and occur only rarely.
<b>Wanting to know more about the flexible exports for three-phase 14.5 kilowatt system, when will this likely come online?</b>	Widespread rollout will begin in June 2026 when the NSW government portal and mandate go live. Trials are already onboarding limited customers.
<b>Is there a transition period three months after June 2026?</b>	Yes, all DNSPs have proposed a three-month transition period.
<b>Regarding internet connected inverters. What's the expected connection type? 5G/4G or wi-fi? What will happen to the export setting when communication between the inverter and EE is interrupted (wi-fi/4G disconnection)? What export settings will apply then?</b>	It is expected that Wi-Fi will be the primary connection method for homeowners. Where 4G is available, it could be used but this isn't something that will be provided by the utility. When connection is lost the exports of the inverter will slowly ramp down to a default fall back limit (1.5kW) until connection is restored.
<b>How is EE going re analysing and augmenting the HV aspect of the grid to handle the ever increasing load (HV Amps) from expanding number of pad subs for Ultra Fast EV systems.</b>	This is still an active area of study that we are developing capability to monitor and learn from.
<b>What is the mechanism for ASPs to provide feedback to ASP representatives of the ASP advisor committee?</b>	Concerns should be raised through your usual ASP scheme contacts. The team will then take issues to the committee on your behalf.
<b>Is there an ASP scheme database that ASPs can view to check their current employees or subcontractors?</b>	Yes, the new scheme will provide overviews of registered contractors. ASPs will need to keep records updated, for example when staff move between companies.
<b>Could you add an option in the portal for application fees to be sent to someone else (like a client)?</b>	That feature already exists in the Connections Portal. Invoices can be forwarded to other parties for payment. For more information, please contact <a href="mailto:CWAdmin@endeavourenergy.com.au">CWAdmin@endeavourenergy.com.au</a>
<b>Can we generate asset numbers ourselves?</b>	Not yet. The TAS/TAL spreadsheet is still required, but the intention is to move toward seamless asset numbering in the future Connections Portal.
<b>How do EV loads impact maximum demand calculations for small developments?</b>	Current AS3000 calculations differ from DNSP demand methods. There are some gaps, but Endeavour believes its current ADMD has headroom to accommodate residential EV loads in Western Sydney for now from total diversified demand perspective.
<b>What happens when Council specifies slimline columns in DA consent?</b>	All stakeholders have a preference for less street furniture/assets hence slimline columns not listed in 4.7.2. of LCI 0001. Please contact <a href="mailto:Mainsenquiry@endeavourenergy.com.au">Mainsenquiry@endeavourenergy.com.au</a> should you require more information
<b>Is there any accessory recommended for installing cross arms on existing concrete poles?</b>	No. Drilling concrete poles is restricted due to reinforcement risks, so the solution is to replace the pole.
<b>Was there an important notice or TB released regarding the release of MCI-10?</b>	No specific notice was issued, but all standards updates are published on the ASP Portal.

# Q & A

Question	Answer
How close can a street light column be installed near a driveway?	LDI drawing 241056 is now updated to show min 300 clearance from driveway to edge of column base to match clearance with pillars
Discrepancies between MCI-6 and MDI-28 updates?	Minor amendments to both standards are currently in progress and will be issued upon approval.
In Wetherill Park projects, we’ve found gas trunk mains during works. Is there a tool in Endeavour to calculate safety compliance like the 3E tool?	<p>Endeavour Energy doesn't have a tool as such; we would refer to the Safe Work Guidance material to work near UG assets: <a href="#">Work near underground assets – Guide</a></p> <p>Additionally, BYDA has some information relating to Jemena assets: <a href="#">Jemena maps update for BYDA users - BYDA</a></p>
Can DNSPs start considering cold shrink kits (useful in total fire ban cases)?	We have not yet introduced these products, but we are aware of their availability in the market. We may consider them in the future.
When will ASPs have direct access to field books?	ASPs currently do not have access to Content Server where drawings are stored. The team is exploring a secure way to provide access, such as through a network location or restricted folder, without granting broad permissions.
Can you extend ArcGIS to include system diagrams?	SOPS is a legacy system and is not used for operations. The team is working with ADMS to resolve constraints and provide a replacement or accessible view in the ESRI environment.
It would be good if LB switches were included in GIS layers.	Work is ongoing to bring more layers across from GNet GIS into the ESRI portal. MDI readings may be accessible via GridSight, which will be discussed with that team.
Will ASPs be able to view SAP?	ASPs are unlikely to be given direct access to enterprise SAP. The strategy is to open up key information through more seamless channels. Some data is easier to expose than others due to legacy constraints.
Can ASPs access photos of PM substations?	An internal ESRI layer of asset photos is being consolidated, and once completed, it should be shareable via the portal.
Comment on the drawing standard I submitted: will standards be updated?	As part of the new design and CAD tool, drafting standards (including WAE) will be revisited. The aim is to enable direct GIS input from CAD, with updated symbology and data structures (SAP, ADMS, etc.).
Will there be scope to improve the current GIS CAD 2021 tool (e.g., line types/validation issues)?	Major changes will not be applied to the current tool as the supplier no longer supports it and a full replacement is underway. Minor tweaks may be handled in-house, so specifics should be logged.
Is there a forum/email to raise CAD/GIS issues affecting productivity (validation, etc.)?	Yes, you can email CWTech. The Connections team will forward items that require GIS attention.
Can the EIA tool produce a summary of all environmental impacts for a project/area so ASP3s don’t have to check multiple sites?	<p>The tool integrates many external mapping layers with a “View mapping” tab for applicant to take screenshots as evidence. Certain questions will still require applicants to navigate to external website to carry out relevant checks. The information icon (help icon) will provide relevant website links for applicants to navigate to the appropriate websites for the checks.</p> <p>Once application has been successfully submitted and approved, the applicant would receive a Summary Environmental Report (SER) in PDF format.</p>

# Q & A

Question	Answer
For plan approval, what’s the actual deliverable — PDF, presentation, evidence pack?	Responses are populated in the digital tool. Once reviewed, approved, and submitted, a PDF SER will be auto-generated (similar to the old FAT0038).
Can internal company reviewers check the SER before it’s submitted to Endeavour?	The EIA tool will include the following functions once it goes live: <ul style="list-style-type: none"><li>•Users within the same organisation can search, view, and review all applications, regardless of who submitted them.</li><li>•Applications can be transferred to another user within the same organisation.</li></ul>
Will the tool cover AHIMS/other environmental databases so ASP3s don’t need to check elsewhere?	<p>The tool integrates many external mapping layers with a “View mapping” tab for applicant to take screenshots as evidence. Certain questions will still require applicants to navigate to external website to carry out relevant checks. The information icon (help icon) will provide relevant website links for applicants to navigate to the appropriate websites for the checks.</p> <p>However, the applicants are expected to carry out the appropriate level of assessment pending outcome of the due diligence check. For example, if the proposed work is within a mapped AHIMS buffered area, the ASP is still required to carry out further investigation (e.g. ordering site card, engaging Aboriginal heritage consultant) to accurately assess impacts of the proposed work.</p>
Multi-stage developments keep getting allocated to multiple CNEs even when noted — can this be fixed?	The preferred approach is to allocate one engineer for multi-stage sites, but the process sometimes misallocates. The team will review and improve allocation, liaise with CDMs, and recommends using the CNS contact list on the ASP Portal for quick escalation.
Can we get full surveyed/LiDAR pole data (XYZ, pole height, properties) to verify overhead designs against GIS/utility data?	ASPs can access NEARA, which is a digital twin with LiDAR and a 3D model. It contains this data and is a platform Endeavour plans to invest in, and ASPs are encouraged to use it.
What are Endeavour’s intentions regarding “ring-fencing” — competing vs supporting ASP3s?	Endeavour’s strategy is to enable ASPs, remove barriers, and step aside where possible. Internal efforts will focus on complex areas, while administrative and routine processes will be automated.
Significant delays for works at zone substations (e.g., 12–18 months for cable terminations) — will you publish an important notice?	Internal works such as design, secondary systems, and double cable modifications create long lead times. The team is now communicating risks and typical timeframes earlier, aligning to realistic energisation dates, and including this in new design briefs. Specific projects should be escalated for review.



**Endeavour  
Energy**



**POWER**  
together