



JEN Customer Council Moving to a sustainable future: Price Reset 2026-31

29 May 2024



Welcome

Shaun Reardon, Executive General Manager Jemena Networks



“We acknowledge the Traditional Owners of the land on which we operate and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.”



Help shape the 2026-2031 proposal



Today's agenda

Time	Item
9.30am	Welcome
9.45am	Customer insights deep dive
10.45	Key network challenges and priorities
12pm	Working lunch & stretch break
12.10pm	Customer education and communication
12.45pm	Reflections
1pm	Close



Hopes for the session

What are you hoping to get out of today's session?

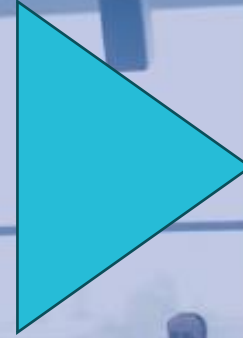


A woman with dark hair and glasses, identified by a name tag as Deepa, is smiling and looking towards the left. She is holding a card that features a colorful illustration of a house. The background is slightly blurred, showing other people in a social setting. A large blue graphic with various icons is overlaid on the bottom right of the image.

Customer insights – recommendations & preferences for the future

DEEPA





Jemena's People's Panel



Customer stations



**Residential
customers**



**Small & medium
business
customers**



**Large commercial
& industrial
customers**





Customer insights station

At each station

There are three customer stations to be immersed in.
Reflect on the customer insights and what resonates with you or stands out from a customer preference point of view.



Given this, discuss and capture:

- **What advice would you give to Jemena on how to best take on board and respond to customer feedback?**
- **What further advice do you have for Jemena on how to best serve the customer group?**





Reporting back – Group discussion



- 1. Responding to customer feedback**
- 2. Advice from Jemena**



Future Network challenges

Theodora Karastergiou
Future Network & Planning Manager



Electrification & challenges

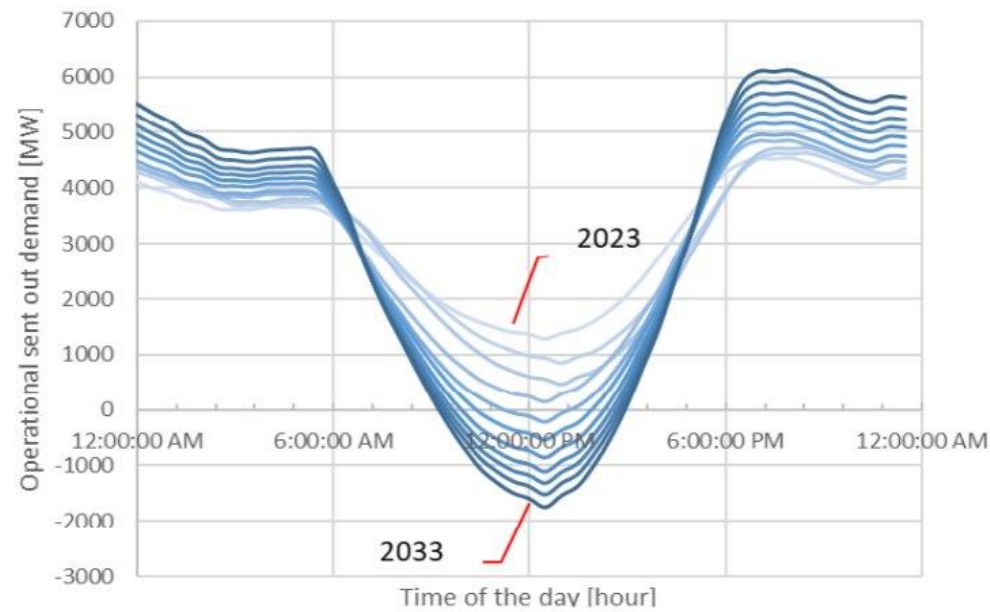
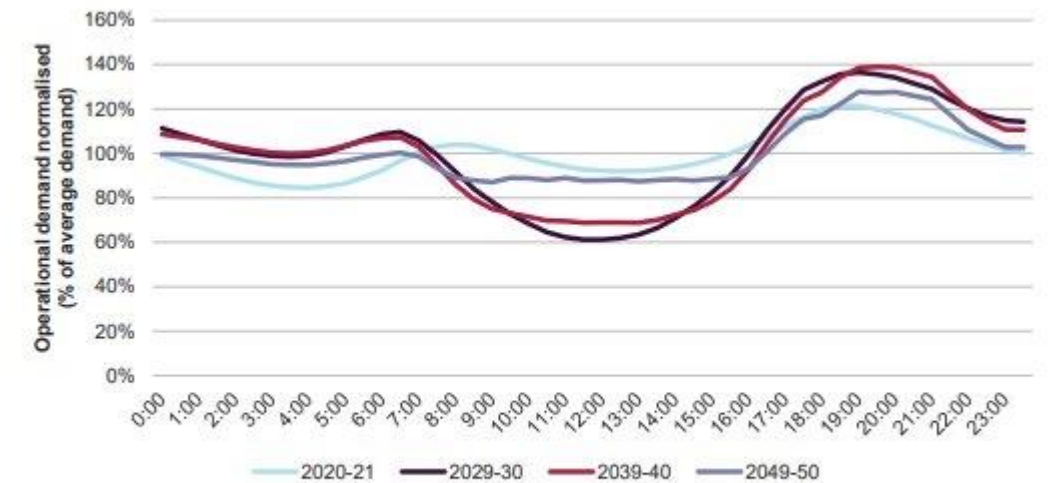


Figure 21 NEM normalised average time of day operational demand, actual and Step Change



© AEMO 2022 | 2022 Integrated System Plan

Figure 1 Forecast Victorian daily load profile on minimum demand day (2023 -33)



Questions



Digitisation of the grid and automation

Implementing a Future Network Strategy

Flexible
services

Market
enablement

Strategic
Network
Analytics
Platform

Dynamic
Network
Configuration

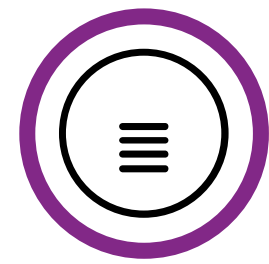
Analysis of
AMI* data

Strengthening the network and technologies while realising long term savings & efficiencies

*Advanced Metering Infrastructure (AMI) data

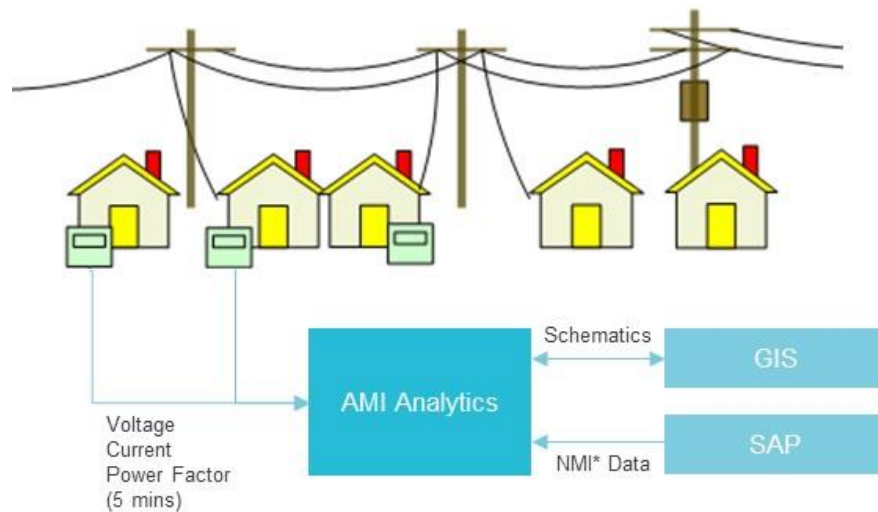


Jemena Network Analytics



Advanced Metering Infrastructure (AMI) data analytics is being used to:

- Improve network knowledge
- Analyse and understand network behaviour
- Drive network improvements
- Improve productivity

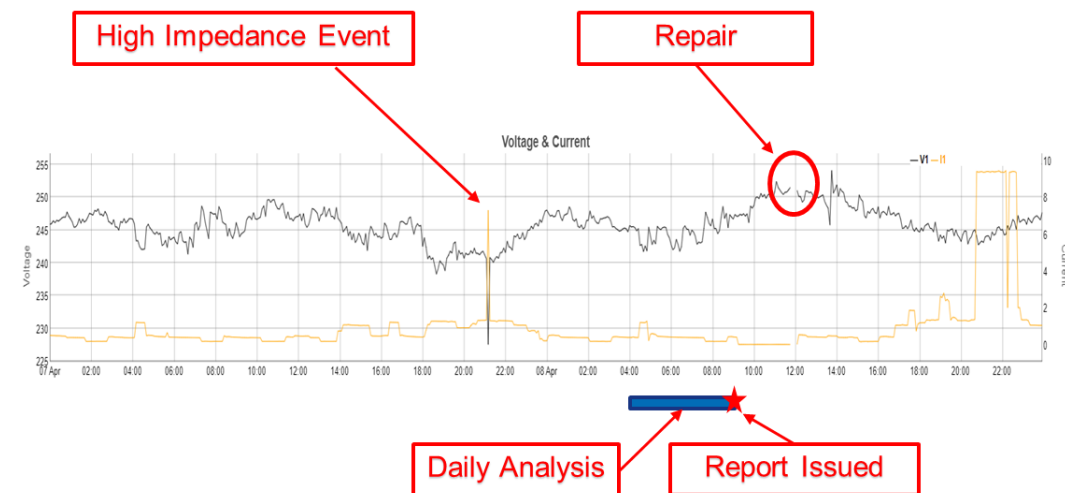


* NMI – National Metering Identified is a unique 10 or 11 digit number used to identify every electricity network connection point in Australia

Remotely investigate power quality issues e.g. voltage spikes



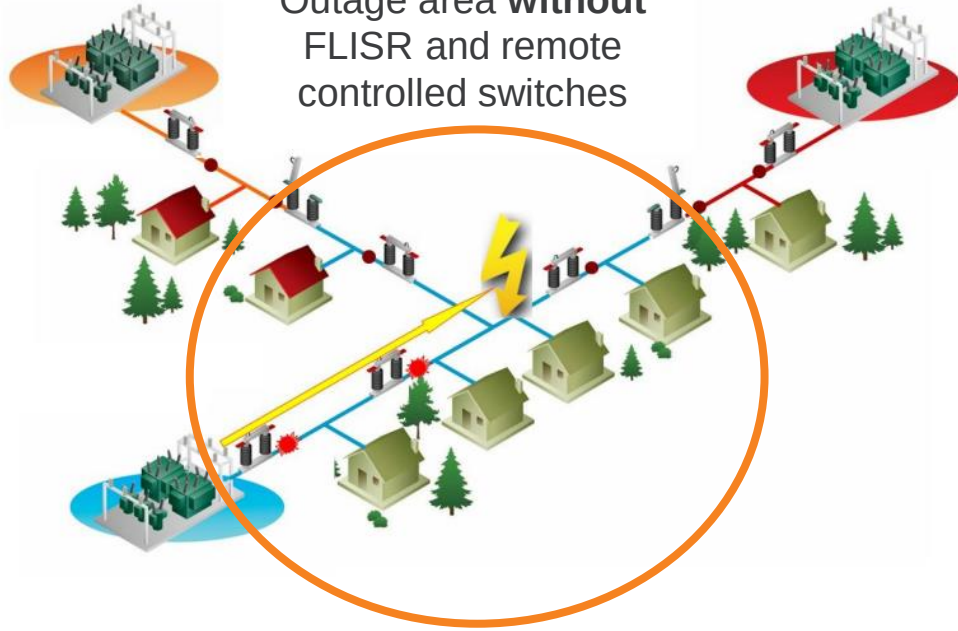
Detect broken supply neutral / high impedance for safety



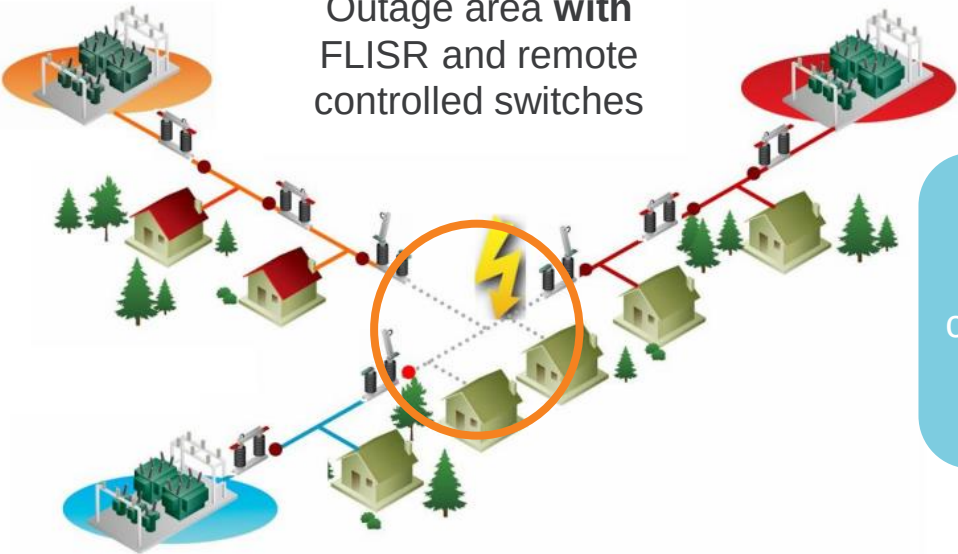
FLISR (Fault Location Isolation & Service Restoration)



Outage area **without**
FLISR and remote
controlled switches



Outage area **with**
FLISR and remote
controlled switches



\$2.1M total savings to date

24 Operations

39,701 customers restored within 3 mins (rather than 45 mins)

0.1 SAIFI and 4.7 min SAIDI reduction

STPIS Saving: \$102k

On 1 August 2022, a car hit a pole interrupting supply to 1,883 customers. FLISR operated and restored supply to 1,863 of these customers in 1 minute 51 seconds, leaving only 20 customers with a sustained outage

STPIS Saving: \$233k

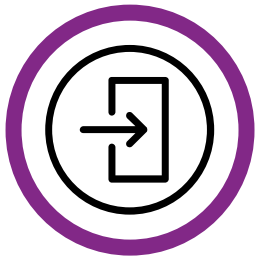
On 9 February 2023, a possum fault interrupted supply to 5,048 customers. FLISR operated and restored supply to 4,376 customers in 1 minute 21 seconds, leaving only 672 customers with a sustained outage

STPIS Saving: \$177k

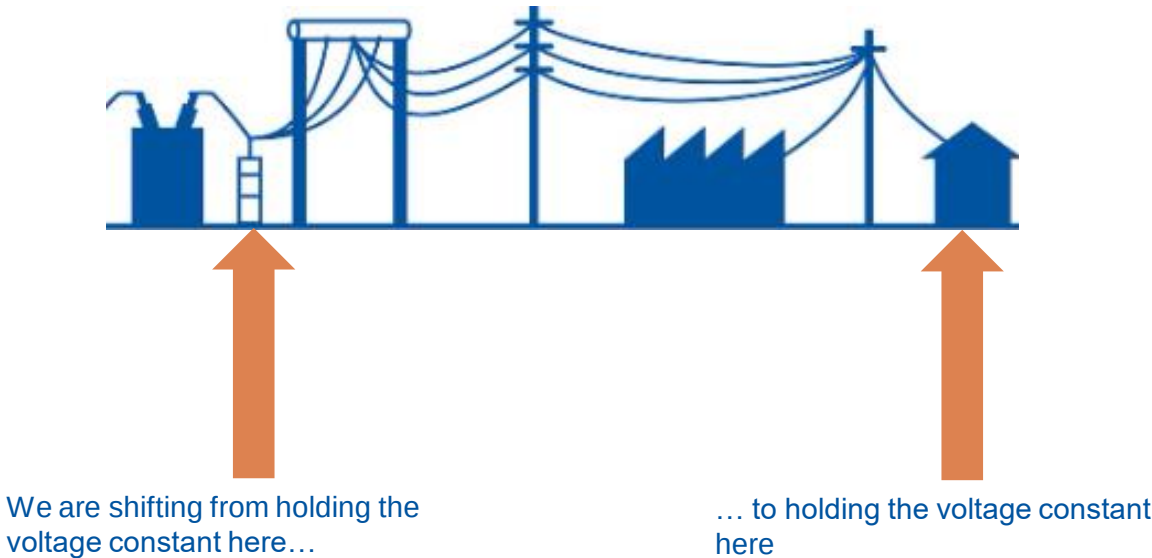
On 19 April 2024, a substation failure interrupted supply to 5,200 customers. FLISR operated and restored supply to 3,352 customers in 2 minute 30 seconds, leaving 1,848 customers with a sustained outage

**STPIS savings calculated based on ~ 40 mins restoration without FLISR and remote switches*

Dynamic Voltage Management

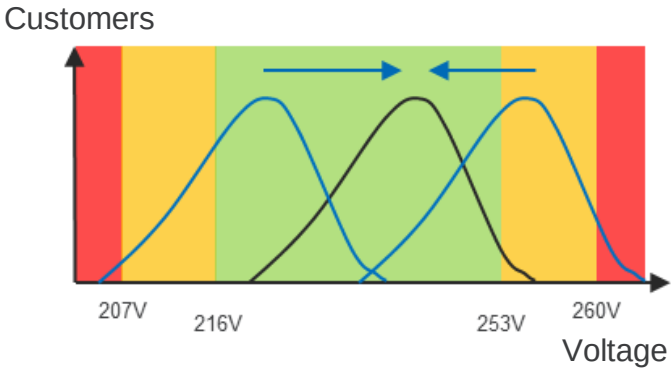
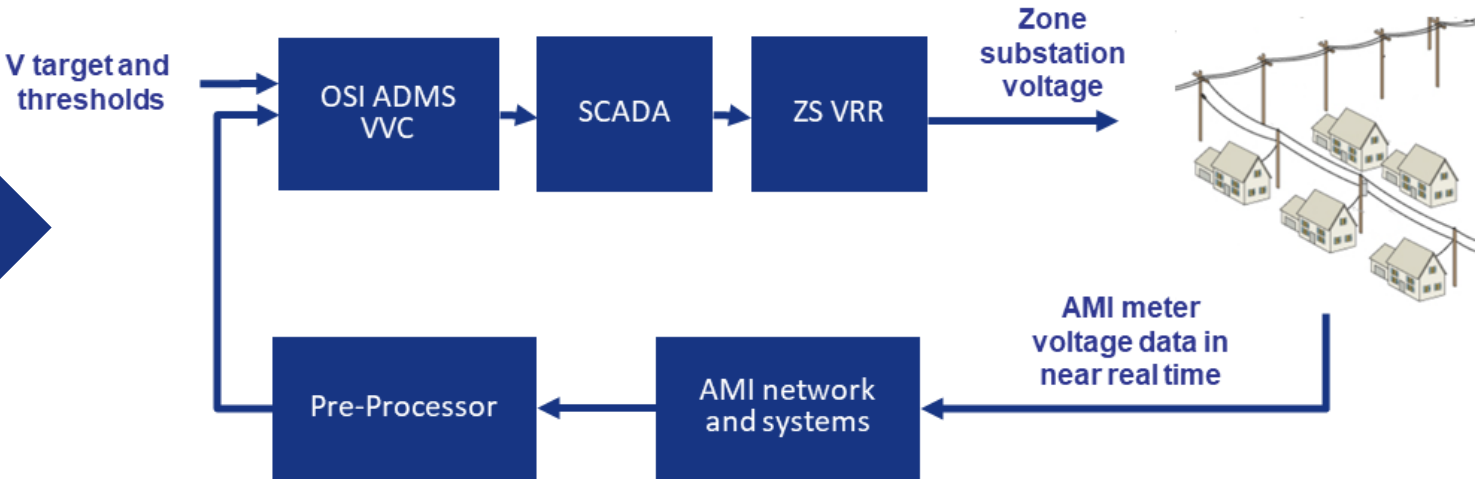


Normally, the voltage at the zone substation is held relatively constant with the voltage at the customer premise varying depending on the load on the network (with the voltage at the customer premise being highest at times of light load and lowest at times of high load)



We are piloting using the VVC module and near real-time AMI data to control the voltage at the zone substation with the aim of keeping the voltage at the customer premise relatively constant

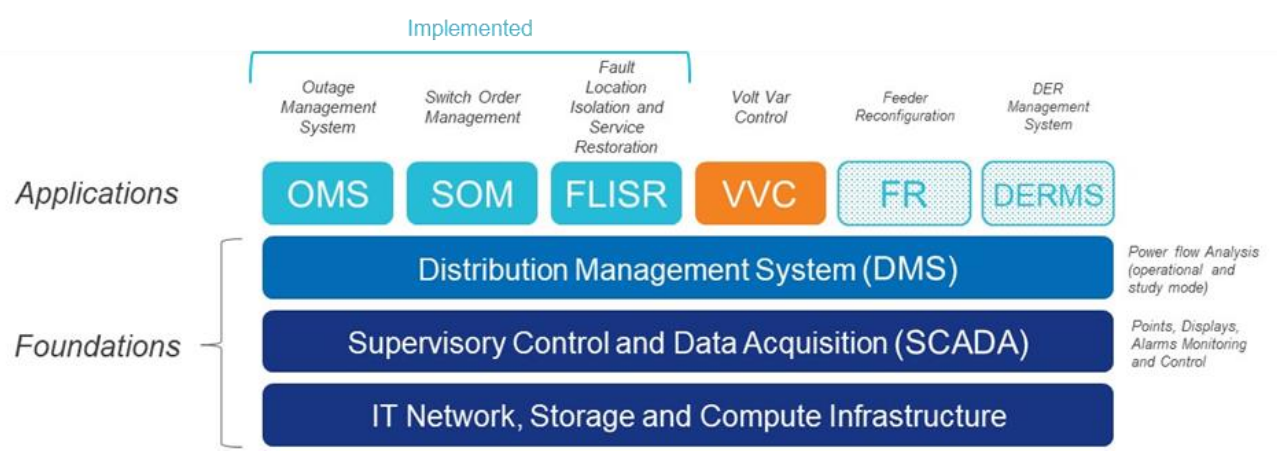
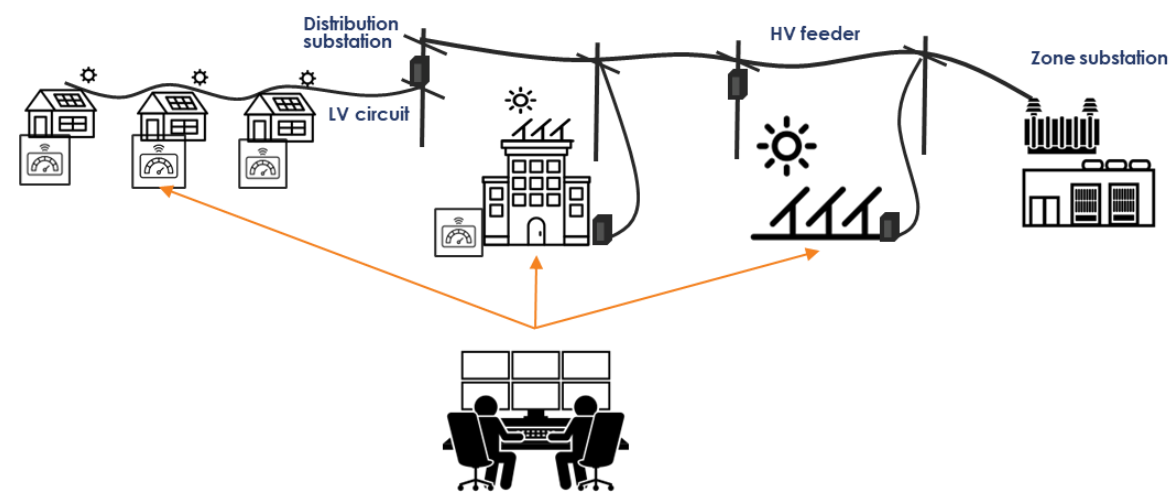
How it works



DERMS (Distributed Energy Resources Management System)



Addressing minimum demand: As solar generation continues to displace centralised generation, there will be times that solar generation will need to be curtailed to manage the supply-load balance to maintain system stability



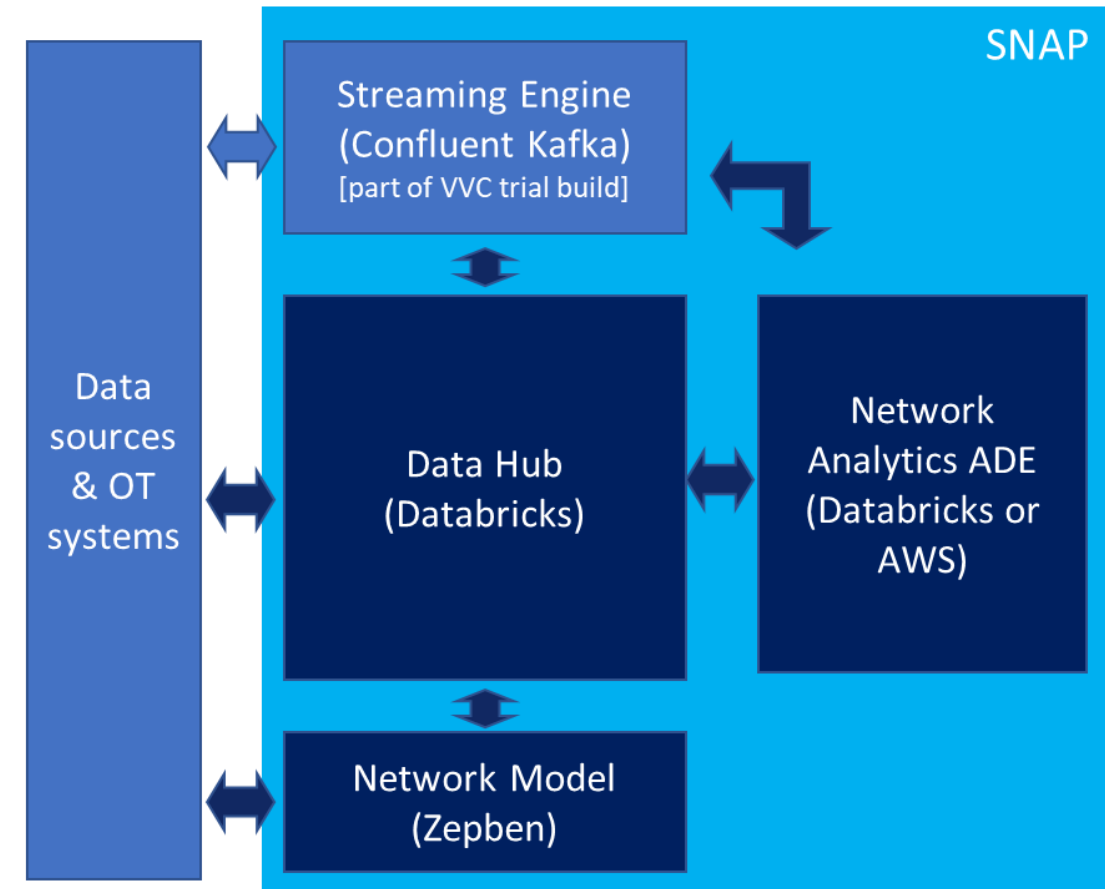
We will continue leveraging the foundations we are laying with our ADMS, analytics platforms and smart meter data to deploy Distributed Energy Resources Management Systems (**DERMS**)

SNAP (Strategic Network Analytics Platform)

A foundation platform for building and delivering analytics applications, that is reusable for multiple applications including network analytics, VVC, DERMS, ..

SNAP comprises:

1. **Streaming engine:** Supports near real-time & high-volume data processing required for near real time analytics, monitoring & control. This component is part of the VVC build.
2. **Data Hub:** Access, store & deliver the data required for network analytics, including data integration, management, governance and security.
3. **Network Model:** Provides a standardised “GIS” network model that also supports dynamic network states required for emerging analytics applications.
4. **Network Analytics Application Development Environment:** An environment for developing and delivering network analytics applications.



■ = new
■ = existing

ADE = Application Development/Deployment Environment

Questions



Group discussion



Digitisation and automation of the grid

What about our approach to digitisation and automation of the grid do you think will set us up for the future?

What other considerations or advice do you have for Jemena on digitisation of the grid?



Network resilience

Michael Ciavarella



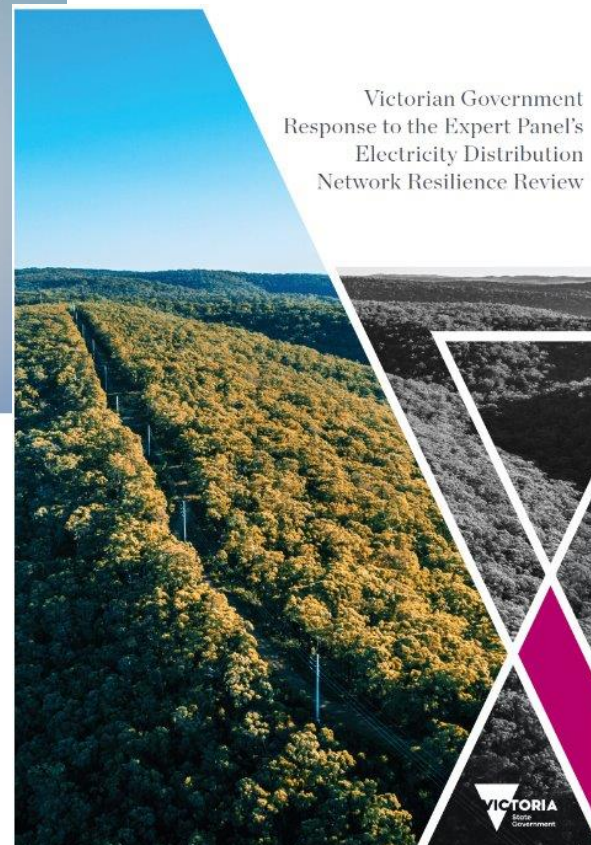
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Governance & the Victorian Government Network Resilience and Network Outage Reviews



AER AUSTRALIAN
ENERGY
REGULATOR



Victorian Government
Response to the Expert Panel's
Electricity Distribution
Network Resilience Review

VICTORIA
State Government



POWER OUTAGES
FEB 2024

Share your experience with the
Network Outage Review Panel



Victorian Government Inquiry Recommendations on Network Resilience

Recommendations to help reduce the *likelihood* and *impact* of prolonged power outages

What we heard

Distribution businesses (DBs) are not proactively investing to mitigate the risk of prolonged power outages, because the national regulatory framework does not embed resilience as an objective.

Recommendations

1



Immediate reform

- A Victorian Network Resilience Investment Strategy is needed to drive DB investments in resilience solutions to mitigate the risk of prolonged outages at the highest-risk locations, informed by community needs

2



Enduring reform

- DBs required to develop an all-hazards approach to risk mitigation for the purposes of safety, reliability, security and resilience of the electricity system.

3



Longer term reform

- The national legislative framework amended to drive DB investments in resilience in the longer-term

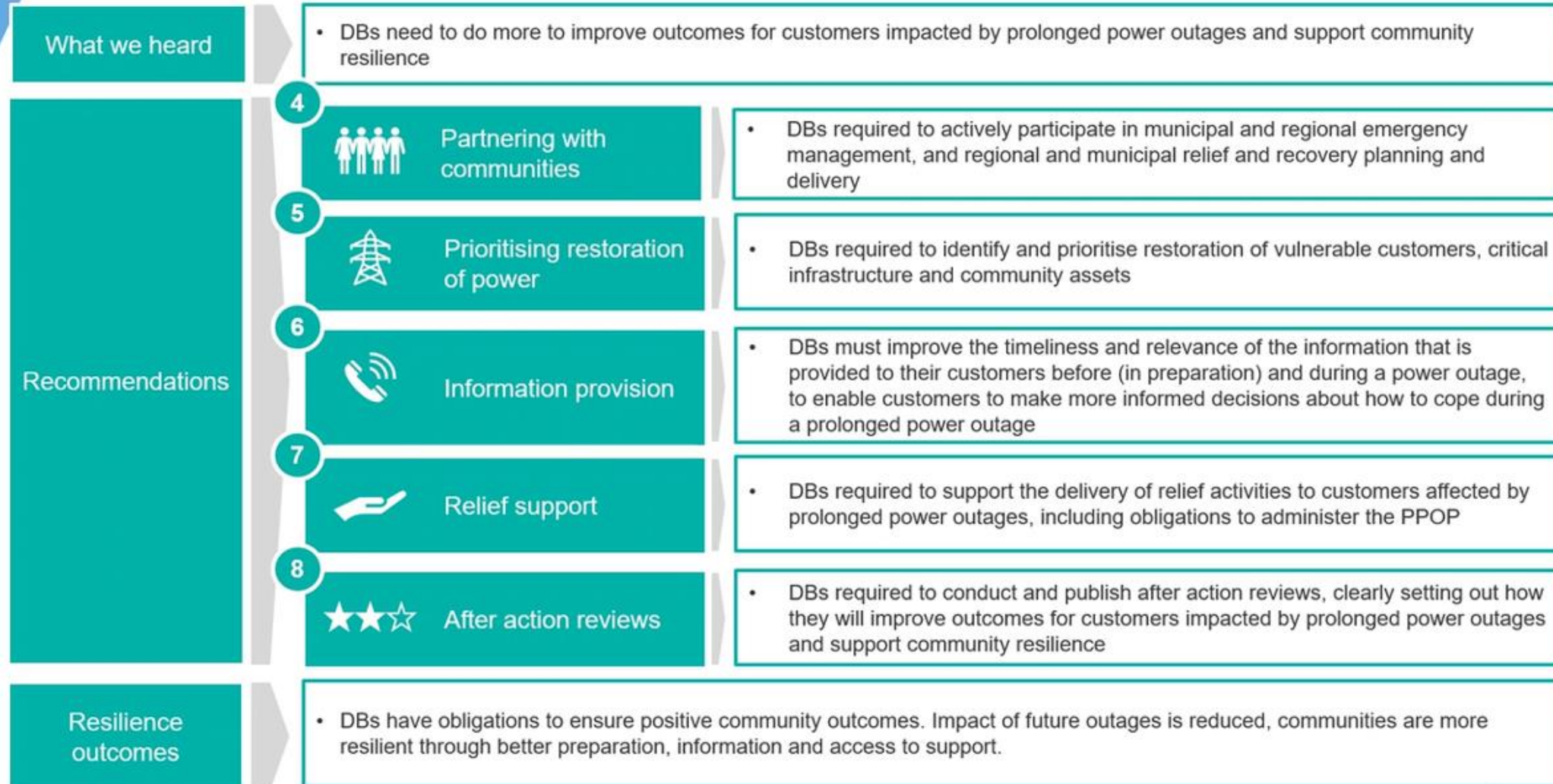
Resilience outcomes

1. Investments, by 2025, in highest-risk locations to reduce the likelihood of prolonged power outages
2. DBs have new obligations to make Network Resilience Plans, similar to the Bushfire Mitigation Plans
3. Ongoing resilience investments from 2025 onwards, enforced both through Victorian regulations and the national framework



Victorian Government Inquiry Recommendations on Network Resilience

Recommendations to help reduce the *impact* of prolonged power outages



Jemena electricity network resilience trends

Hazards	Areas of greater exposure to key hazards	Relative exposure of different asset types to select hazards
Extreme rainfall (flooding)	Sunbury and Gisborne South, West Footscray, Hadfield and Heidelberg West	About 5% of distribution lines, 4% of distribution substations and 10% of zone substations
Bushfires	Gisborne South and its surrounding regions and Woodlands Historic Park	About <1% of distribution lines and 1% of distribution substations
Extreme heat (days over 35°C and/or days over 40°C)	Relatively uniform across the distribution area	Assets across the network are similarly exposed
Extreme wind (wind gust >100 kmh)	Region surrounding Gisborne South, and in proximity to Merri Creek and Darebin Creek	About 3% of distribution lines
Sea level rise (storm surge flooding)	Williamstown	Less than 1% of distribution lines and distribution substations and about 3% of zone substations



Our challenges

- **Uncertainties** in the timing of when the Victorian Government's Inquiries' relevant recommendations will be legislated
- How do we value network **resilience in assessing network resilience investments**
- **AER review of the value of network resilience for widespread and prolonged outages (about 12 hours) is ongoing.** Aims to complete the review by December 2024.
- We are keen to **understand our customer's view on ex-ante versus ex-post approach to investing on network resilience**



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Developing a comprehensive Resilience Strategy

Using technologies such as LiDAR and Digital Twin Technology



Questions



Group discussion



Network resilience

What are the key challenges from a resilience perspective that you'd like to see us address, and specifically in our Resilience Strategy?

Given your experience and knowledge, what other considerations or advice do you have for Jemena on network resilience?



Pricing and equity – tariffs

Matthew Serpell
Manager Electricity Regulation



Pricing principles to protect customers



**Fairness &
equity**



**Efficient
cost**



**Simple to
understand**



**Simple to
implement**



**Cost-
reflectivity**



**Efficient
price signals**



**Customer-
reflectivity**



Adaptability



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- ## Customer engagement

- Engagement on tariffs with our People's Panel, Customer Voice Groups, large customers and small and medium businesses.
- State-wide residential tariffs proposed with a solar soaker was endorsed by our residential customers

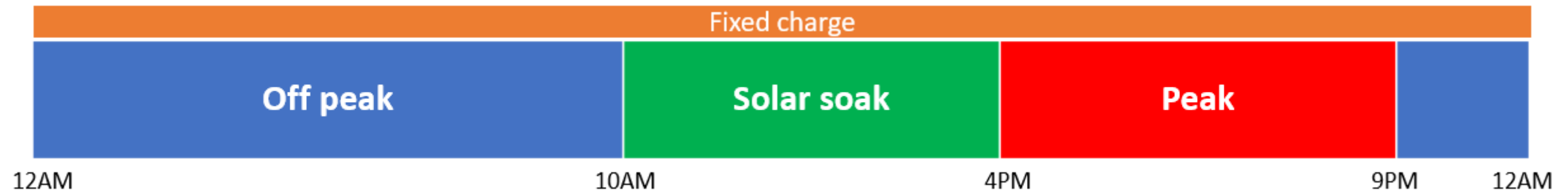




Proposed state-wide tariffs



All customers



All customers can benefit from the solar soak component of the tariff with reduced charges during the middle of the day

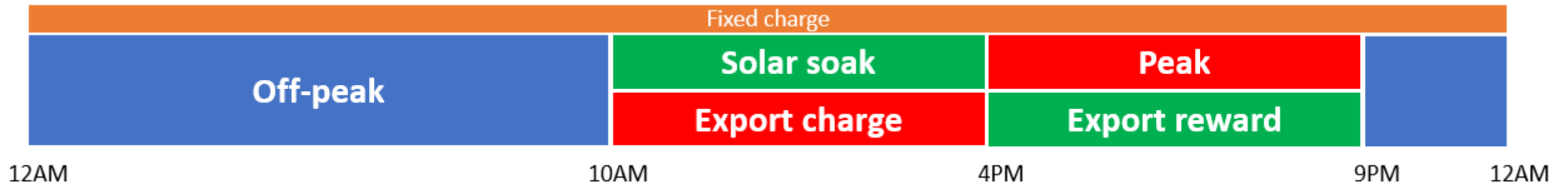
Example numbers





Proposed state-wide tariffs

Customers with rooftop solar only (most likely with batteries)
– OPT-IN & OPTIONAL ONLY



Customers with rooftop solar who have battery storage who choose to be on this tariff will benefit

Example numbers



Questions



Pricing and tariff structures

What other considerations or advice do you have for Jemena on the proposed tariffs and their implementation?



Customer education and communication

Sandra Centofanti, General
Manager Customer & Commercial



What's important to customers – education & communication



e

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A hand holds a tablet displaying the Jemena website. The website interface includes a navigation bar with links like 'Electricity View', 'Your Devices', 'Saving Electricity', 'Compare', and 'Electricity Outages'. The main section is titled 'Your Electricity Use' and features a bar chart showing electricity consumption for 'Yesterday' (11 May 2016). A summary box on the right indicates that consumption increased by 20% compared to 2 days ago and predicts a cost increase of 0.37. The background of the image is a blurred indoor setting.



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A circular inset image showing a woman with dark skin, wearing a green turban and a black and white vertically striped shirt. She is looking down at a light-colored tablet device she is holding with both hands. The background is blurred, suggesting an outdoor setting with trees and a building.

A circular inset image showing a man in a denim shirt and a tan and navy cap, looking at a yellow smartphone. He is smiling slightly. The background is a blurred indoor setting, possibly a kitchen.



Questions



Group discussion



Customer education and accessible communication

What are the top priorities for driving customer education and accessible communication you want us to drive?

What other options would you like us to do to support customer education and accessible communication?



Thank you & Next steps



**to hear,
listen
and think**

