



Your Wheatbelt network: recent and future challenges and opportunities

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**Western Power acknowledges the Traditional Owners of the land on which we meet,
and we recognise their continuing connection to lands, waters, and communities.
We also pay our respects to Elders past, present and emerging.**

The Southwest Network



Australian Energy Market Operator (AEMO) manages the electricity and markets across Western Australia and is responsible for maintaining power system security.



GENERATION

Generators make electricity at power plants using a variety of fuel sources.

Western Power

TRANSMISSION & DISTRIBUTION

The network or grid consists of transmission and distribution assets.

RETAIL

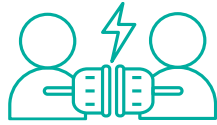
Retailers manage the interface between the network and consumer.

Western Power today



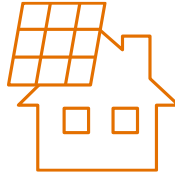
3,200

strong workforce



2+ million

people connected



1.9GW

grid connected
solar

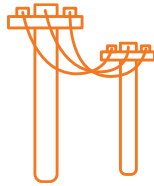


13

community
batteries



168 stand-alone
power systems



104,000km
of power lines



277,000
streetlights

**Our grid
covers
255,000 km²**

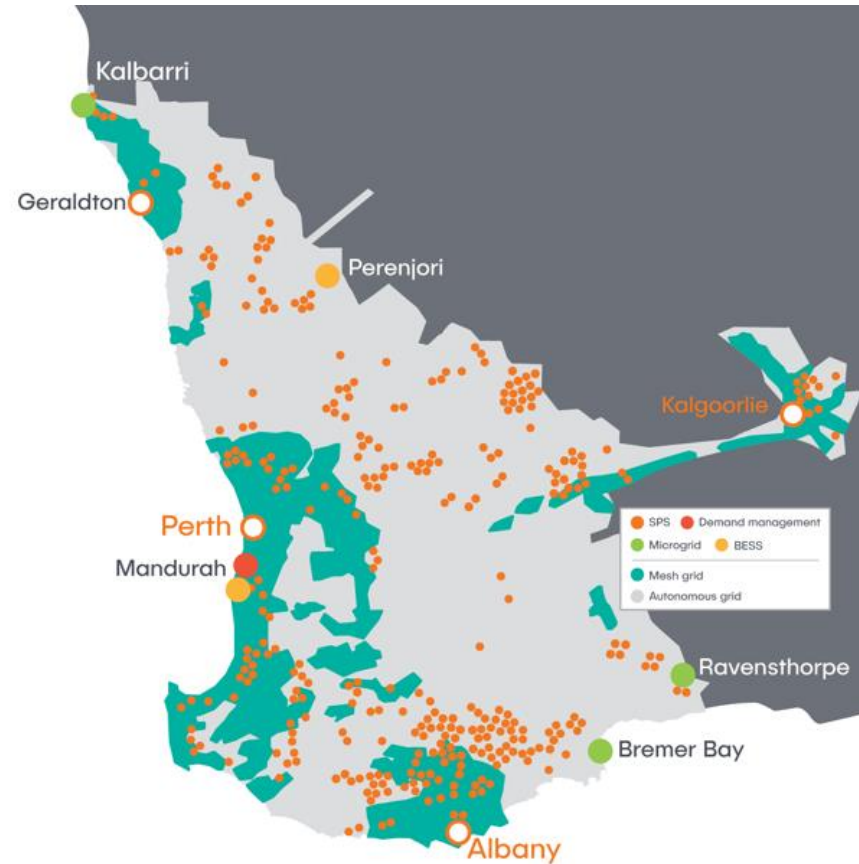
SWIS Demand Assessment

- SWISDA considered requirements of existing industrial users and potential growth in new industries like hydrogen and critical minerals
- It provides a vision for investment in transmission infrastructure essential in supplying low-emissions electricity, enabling industry to achieve their decarbonisation goals
- State Government provided \$126 million for Western Power to investigate vital network enhancement options and announced a further \$708 million to deliver this work and plan for an increase in future renewable generation.



Future of the regional grid

- New ways of delivering power i.e. Stand-alone Power Systems (SPS) and microgrids.
- Poles and wires to be maintained.
- Depots will remain supporting regional communities.



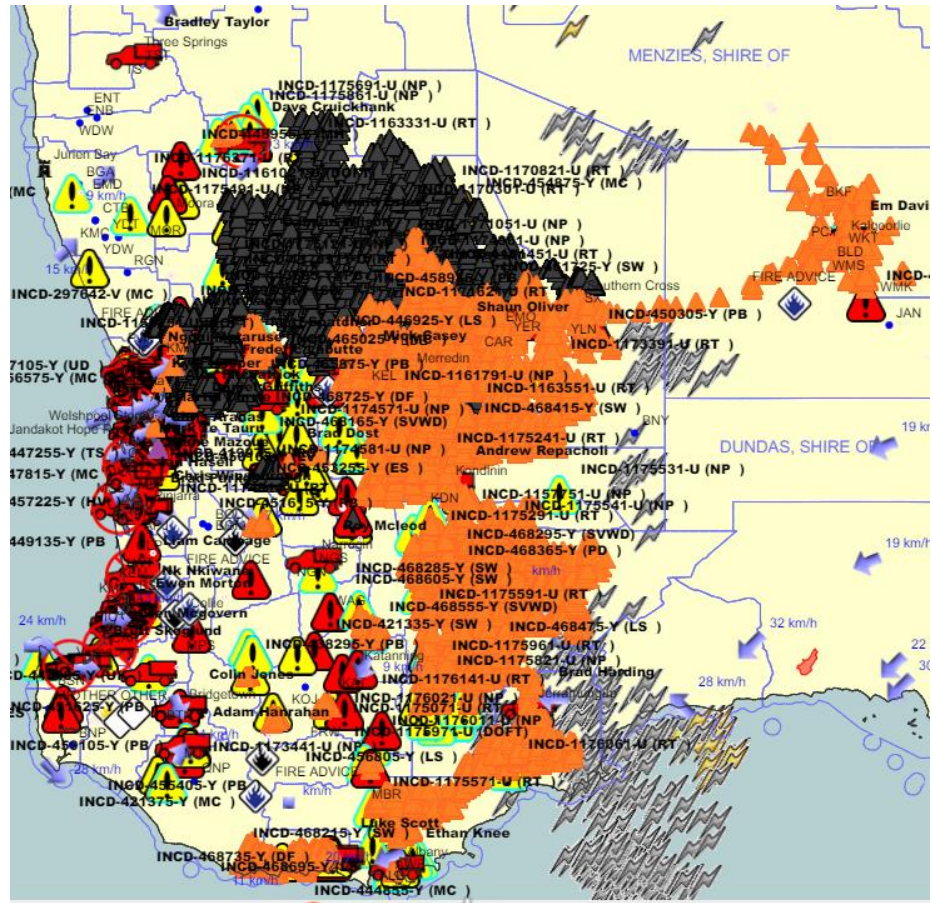
Continuing Local Investment

- **\$3M network improvements in Pingelly and Cuballing**
 - ✓ replacement of 230 poles, 27km of overhead lines, along with other maintenance activities.
- **\$5M network improvements in Cunderdin and Meckering**
 - ✓ replacement of more than 290 poles, 47kms of overhead powerlines, installation of LED streetlights, upgrading reclosers and other essential maintenance.
- **Distribution transformer upgrades**
 - ✓ upgrade of 19 transformers in the Mid West and Wheatbelt to increase network resilience.



What happened in January 2024!

- Bushfires + Chittering + Gingin + Bindoon
- Heatwave, Thunderstorms & Pole Top Fires
- 34,000 Customers off
 - Perth Hills
 - East Country
 - Kalgoorlie (16k)
- 350+ Hazards
- 8 Transmission lines
- 220kV towers x 5
- EPWA Emergency activation



220kV Kalgoorlie Transmission Rebuild

January 2024 (2.57m) https://youtu.be/vqEK_kR3oEs



Takeaways

- Customer reliance on electricity is increasing.
- The grid is changing driven by the customers.
- Western Power is responding to meet this need.
- Improving customer and stakeholder communication.
- Critical importance of Local Government and community in regional areas.

Thank You

