

Powering the future of Ballarat

Councillor briefing

21/6/23

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Investing in Ballarat

- **We're making significant investments in the Ballarat region.**
- This work is ensuring the network stays safe and reliable while meeting our customers shift towards decarbonisation and electrification
- Our activities include:
 - Work to increase the network capacity for Ballarat Hospital.
 - Upgrades and network optimisation to support more solar connections and exports.
 - Installation of REFCLs to provide added bushfire safety for communities.
 - Installation of new Automatic Circuit Reclosers (ACRs), ongoing feeder patrols, vegetation inspections and cutting as well as network inspections and maintenance to ensure safety and reliability in the bushfire season.

How we currently power Ballarat

Ballarat is already supported by two zone substations that transform electricity to a voltage level that can be safely transported around the CBD and surrounding communities.

Ballarat North Zone Substation

- Norman Street, Wendouree
- Supplies ~35,000 customers, including McCain Foods, Mars Australia, Laminex, Selkirks Bricks, Unigrain, Ballarat Base Hospital.

Ballarat South Zone Substation

- Sutton Street, Delacombe
- Supplies ~45,000 customers, including Boral, Bendix Brakes and St John of God Hospital

What has changed

Population growth, area development and electrification of everything is driving the need for a new zone substation in Ballarat.

- As at December 2022, approximately 1,500 commercial premises and 10,000 residential premises have been connected to the electricity network within the Ballarat local government area since 2016.
- In the same period, we have seen a 12% increase in demand across the broad Ballarat network with some locations seeing up to 24% in growth.
- We forecast that the Ballarat network is expected to have an annual growth rate in demand of 2.4%
- >8km² of new housing developed, excluding new infill housing and commercial development

Delivering benefits for our customers

- New zone substation proposed in our 2021-2026 business plans, approved by the Australian Energy Regulator.
- A new zone substation will deliver major benefits for our customers:
 - Maintain continued operation of important bushfire safety protection devices
 - Deliver capacity for customer load, including new solar, electric vehicles and other technology
 - Provide greater reliability and network flexibility
 - Ensures our ability to service Ballarat's growth

What are REFCLs

- We are now operating Rapid Earth Fault Current Limiters (REFCLs) in 22 locations, including Ballarat.
- REFCL technology works like a large safety switch, reducing the likelihood of powerline-related bushfires.
- REFCLs are installed in both Ballarat-based zone substations, providing protection to all feeder lines supplying the region.
- This technology is keeping our communities safer.
- As supply areas increase, we need to increase the REFCL capacity to support its continued effective operations.

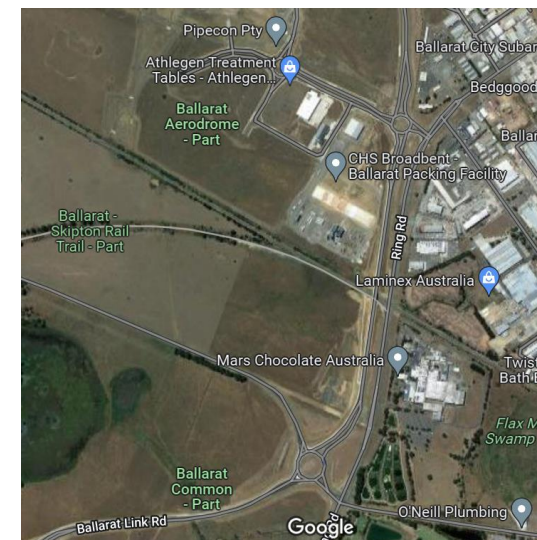
REFCL System Operations

	Transient activations 22/23 fire season	Permanent activations during 22/23 fire season	Transient Total Fire Ban activations since 2019	Permanent Total Fire Ban Activations since 2019
Ballarat North Zone Substation	127	13	0	0
Ballarat South Zone Substation	133	13	3	1
Total	260	26	3	1

Potential locations

We are considering options for the location of a new zone substation in order to best meet electricity demand.

- Assessing two potential locations - land around Ballarat Link Road/Skipton Ballarat Rail Trail, and 203 York Street, Ballarat East, between York Street and Callow Street.
- Need to determine the optimal solution to meet REFCL performance requirements, integrate to the existing electrical network and address future network needs.
- **We are still yet to make a final decision on the site.**



York Street site location



- 203 York Street, Ballarat East, between York Street and Callow Street.
- Owned by the State Electricity Commission since the early 1970s and Powercor since the mid 1990s.
- The land is zoned for construction of services and utilities.
- Any plans for the site would be in line with this zoning.
- A sign flagging a future zone substation was to be built on the site existed until May 2020.

Our engagement so far

- In March, we doorknocked 35 properties neighbouring the York Street site.
 - o Completed 14 surveys - 12 in-person surveys and two follow-up phone call surveys.
 - o Left calling cards and contact details in all letterboxes where we were unable to speak with the residents.
- Findings are helping inform our decision.
- We have shared findings with the community and have committed to continue engaging with them.

If York Street is selected, we will work with residents to address their concerns and feedback.

They can help shape how it looks, the overall external design, plantings and, in consultation with Council whether there are other amenities, that could be built nearby.

Our findings

We received feedback from the community about:

- Visual Impact
- Flooding
- House value
- Health concerns
- Operational noise
- Security and crime concerns

This feedback is all being considered in our planning. Noise, water and other technical studies are currently being finalised to inform the decision about the location.

Considerations when selecting a site

There are a range of factors that we take into account when assessing sites. These include:

- Access to our 66kV 'sub-transmission' network
- Overall cost
- Customer impacts
- Proximity to electricity load (in a location where it is needed)
- Timing

Next steps

- A final decision has not yet been made on the future location for a new zone substation.
- We expect we will be able to announce the location and next steps this year.
- We will keep you updated on our progress and any ongoing engagement.