



Economic Regulation Authority

# Western Power's regulatory test application for a proposed Baldivis zone substation

Issues paper

20 March 2026

## Acknowledgement of Country

At the ERA we value our cultural diversity and respect the traditional custodians of the land and waters on which we live and work.

We acknowledge their continuing connection to culture and community, their traditions and stories. We commit to listening, continuously improving our performance and building a brighter future together.

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## Invitation to make submissions

**Submissions are due by 4:00pm WST, Tuesday, 7 April 2026**

Western Power has submitted a regulatory test application for a proposed major augmentation of its network to construct a new zone substation in Baldivis.

The ERA is seeking submissions from interested parties on the proposal. This paper identifies some of the issues the ERA will consider in its decision and is intended to assist interested parties to develop their submissions.

We would prefer to receive your comments via our online submission form <https://www.erawa.com.au/consultation>.

You can also send comments through:

Email: [publicsubmissions@erawa.com.au](mailto:publicsubmissions@erawa.com.au)

Post: Level 4, Albert Facey House, 469 Wellington Street, Perth WA 6000

Please note that submissions provided electronically do not need to be provided separately in hard copy.

All submissions will be made available on our website unless arrangements are made in advance between the author and the ERA. This is because it is preferable that all submissions be publicly available to facilitate an informed and transparent consultative process. Parties wishing to submit confidential information are requested to contact us at [info@erawa.com.au](mailto:info@erawa.com.au).

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# 1. Introduction

Western Power has submitted a regulatory test application for a proposed major augmentation of its network to construct a new zone substation in Baldivis.<sup>1</sup>

The purpose of the regulatory test is to determine whether the proposal is the best way of overcoming constraints in the wider electricity system.<sup>2</sup>

This means Western Power must demonstrate that it has considered all reasonable alternative options, including non-network solutions such as demand-side management or generation, and that its proposed option maximises the net benefit to those who generate, transport and consume energy in Western Power's network.<sup>3</sup>

To determine whether the regulatory test has been satisfied, we must be satisfied that:

- Western Power's view that its proposed major augmentation maximises the net benefit after considering alternative options is defensible.
- Western Power has applied the regulatory test properly to the proposed major augmentation:
  - using reasonable market development scenarios which incorporate varying levels of demand growth at relevant places; and
  - using reasonable timings, and testing alternative timings, for project commissioning dates and construction timetables for the proposed major augmentation and for alternative options.
- Western Power has conducted a public consultation process that:
  - Included public consultation following the requirements of the *Electricity Networks Access Code 2004*.
  - Gave all interested parties a reasonable opportunity to state their views and to propose alternative options to the proposed major augmentations and had regard to those views and alternative options.
  - Gave reasonable consideration to any information obtained from the consultation when forming its view that its proposed major augmentation maximises the net benefit after considering alternative options.

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<sup>1</sup> A zone substation is a key part of an electricity network. Its main role is to take high-voltage electricity from the transmission network and convert it to a lower distribution voltage and then supply multiple local substations.

<sup>2</sup> The regulatory test is prescribed in Chapter 9 of the *Electricity Networks Access Code 2004*. It applies to all major augmentations which are defined as being an increase in the capability of the network to provide services where the cost of the new shared assets exceeds \$46.8 million (\$ 2025) for the transmission network or \$15.6 million (\$ 2025) for the distribution network.

<sup>3</sup> "Net benefit" means a net benefit (measured in present value terms to the extent possible) to those who generate, transport and consume electricity (as the case may be):

- (a) the covered network; or
- (b) the covered network and any interconnected system.

As part of our assessment of Western Power's proposal, we are undertaking consultation with interested parties. We have prepared this issues paper to help interested parties make submissions. In particular, we are interested in stakeholder views on the following:

- The alternative options considered and the proposed major augmentation.
- Western Power's public consultation process.

Western Power's proposal and associated documents are available on the ERA's website together with this issues paper.<sup>4</sup>

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<sup>4</sup> The proposal and associated documents can be found here.

## 2. Options considered and proposed major augmentation

Currently, electricity consumers in Baldivis are supplied by distribution feeders connected to the Waikiki (WAI) zone substation, supported to a lesser extent to the south by distribution feeders connected to the Meadow Springs (MSS) zone substation.

Due to growing demand, Western Power considers the current electricity infrastructure is reaching its limits and action is needed to ensure reliable power for homes and businesses as the community expands.

As set out in below in Figure 1, Western Power has considered a range of network and hybrid non-network solutions to address capacity issues at Waikiki substation and improve supply in the Baldivis area.

**Figure 1: Extract from Western Power's Options Paper – Table 2: Options to reinforce capacity in the Waikiki and Baldivis area**

Option	Description	Estimated Cost <sup>21</sup> (Total NPC)	Remarks
<b>Network options</b>			
1	Do nothing	-	- Unacceptable risk levels in the coming years and inability to support future load growth.
2	Increase capacity at WAI	\$110.60 million	- capacity gained (at high cost) is constrained almost immediately. This option will not cope with new Baldivis loads and or future developments. - BVS construction can only be delayed in the short-term. - this is a challenging substation fourth transformer expansion, as WAI substation is designed for a maximum of three transformers.
3	Build a new substation at Baldivis in 2030	\$81.69 million	- cut-in/out and reconductor nearby transmission line. - reuses and upgrades distribution feeders. - Western Power owns suitably zoned land in Baldivis. - BVS brings significantly higher reliability and better shares load across substations; uses shorter, less lossy feeders.
<b>Non-network (hybrid) options</b>			
4	Contract network support services to achieve 3-year deferral of BVS	\$102.68 million	- use of distribution Network Support Services (NSS) to flatten the demand profile to defer BVS construction by three years, until 2033.
5	Contract network support services to achieve 5-year deferral of BVS	\$127.08 million	- use of distribution NSS to flatten the demand profile to defer BVS construction by five years until 2035.

Details on the options Western Power has considered and its preferred option are set out in its Options Paper.

Option 3, to build a new zone substation at Baldivis in 2030, is Western Power's preferred option. It considers this option delivers the highest net benefit including:

- Minimal disruption and seamless integration for new (growth related) loads being added into the WEM market.
- Network constraints are addressed for the full zone substation lifecycle at Waikiki and Baldivis.
- Ensures supply and reliability is maintained for Baldivis customers presently at risk of emerging capacity and feeder constraints.
- The proposed site of the Baldivis zone substation is ideal in terms of distance to nearby load centres and is near an existing transmission line that it can connect to. Interconnecting with the transmission line will also enable future improvements to power flows in the north-south corridor between the cities of Rockingham and Mandurah.
- Has the lowest net present cost.

Western Power considers the alternative options, which involve incremental expansion of the existing Waikiki substation and short-term non-network support services, would require substantial additional investment as demand continues to grow and would not efficiently resolve the underlying network constraints in an economically prudent manner. On that basis it considers the alternatives have a higher net present cost and lower net benefit compared to its preferred option.

### Questions

The ERA invites submissions from interested parties on whether:

- Western Power identified a relevant set of alternative options on the proposed augmentation.
- The preferred option selected by Western Power maximises the net benefit after considering alternative options.

### 3. Consultation undertaken by Western Power

As required under the Code, Western Power conducted public consultation before submitting its application to the ERA.

On 24 November 2025, Western Power published an options paper setting out the five options it had considered including its preferred option and inviting submissions from interested parties by 19 December 2025. Responses could be provided online, by email or post.

As required under the Access Code, Western Power's public consultation was advertised on the ERA's website On 24 November 2025.

Western Power also held public engagement sessions as shown in Figure 2 below.

**Figure 2: Extract from Western Power's Regulatory Test Submission – Table 6 Public consultation sessions (BVS zone substation), Nov-Dec 2025**

Event	Date and time details	Description
Library pop-up session	6 Dec 2025 9:00 AM - 6 Dec 2025 12:00 PM	Outside Mary Davies Library and Community Centre, 17 Settlers Avenue, Baldivis
Community drop-in session	10 Dec 2025 4:00 PM - 10 Dec 2025 6:00 PM	Mary Davies Library and Community Centre, Boobook Room, 17 Settlers Avenue, Baldivis WA, Australia
Stakeholder briefing	11 Dec 2025 2:00 PM - 11 Dec 2025 3:00 PM	Online Event - A presentation for stakeholders on the capacity expansion options to meet growing demand in Baldivis and surrounding areas, including our preferred approach.

Western Power included a summary of its stakeholder consultation with its application.

Western Power reports that it received 55 submissions with 54 of those being from existing or future local residents and one from the City of Rockingham.

Submissions were fairly evenly split between supporters of the proposal and stakeholder who had concerns about the site of the proposed substation and/or considered that alternative options should have been considered.

Western Power's consideration of the matters raised in submissions is included in its summary of stakeholder consultation. It decided to retain its proposed option noting:

- It had considered alternative locations for the zone substation and its proposed site provides the best whole-of-system outcomes.
- If the project proceeds it will work closely with the City of Rockingham to ensure architectural, noise and landscaping options chosen are suitable for the proposed facility.

**Questions**

Do you consider Western Power:

- Gave all interested parties a reasonable opportunity to state their views on the major augmentation proposal and to propose alternative options.
- Had adequate regard to the views and alternative options that were submitted.