



Economic Regulation Authority

Draft decision

Western Power Access Arrangement 5

27 September 2022

Slido.com
#9309511

Acknowledgement of Country

The Economic Regulation Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community.

We pay our respects to all members of the Aboriginal communities and their cultures; and to Elders past, present and emerging.

agenda

01

Introduction

Jenness Gardner, CEO ERA

2:00

02

Overview of the draft decision

Steve Edwell, Chair ERA

2:10

▪ **Q&A**

2:40

03

Western Power's update

Sam Barbaro, CEO Western Power

3:10

▪ **Q&A**

3:30

04

Closing remarks

Jenness Gardner, ERA CEO

3:50



Economic Regulation Authority



Who is the ERA?

The ERA is Western Australia's independent economic regulator.

We aim to ensure the delivery of water, electricity, gas and rail services in Western Australia is in the long-term interest of consumers.

A large white wind turbine stands in a dry, open field under a clear blue sky. In the distance, other smaller wind turbines are visible on the horizon. The image is partially framed by a large white circular graphic element on the right side of the slide.

What is AA5?

This is the fifth access arrangement for Western Power's network.

The access arrangement sets the terms and conditions, including prices, for third parties seeking access to the Western Power network.

2

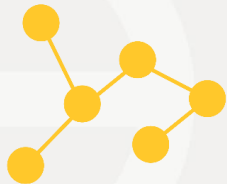
Overview of the draft decision

Issues identified in the issues paper

The ERA published an issues paper in March 2022. It drew attention to:

- Whether the **proposed strategy** to reconfigure and modernise the network and associated investment for AA5 is reasonable, properly timed and based on sound cost estimates.
 - Western Power's approach to **managing uncertainties** about the future and addressing climate change.
 - **Safety and reliability** – particularly areas of the network experiencing relatively poor reliability.
- Whether the **connection processes** will support the new market?
 - Whether **network tariffs**:
 - accommodate reasonable requirements of users and end-use customers?
 - facilitate the connection of storage and electric vehicle charging stations?
 - encourage demand patterns that will minimise the need for network augmentation?





Network tariffs

The access arrangement deals with network tariffs only.

These are tariffs to use Western Power's network, charged to retailers (such as Synergy), generators and very large industrial and mining companies.



Retail tariffs

Retailers decide how to pass on **network tariffs** to their customers.

The Government sets the retail tariff for residential and business customers using <50MWh. The 2022 State Budget stated retail tariffs will increase in line with inflation over the next three years.

45%

The network tariff is about **45%** of the total cost to supply residential and business customers using <50MWh.

Western Power proposal highlights

- Increase in the average bill less than inflation
 - 3.7% increase in 2023/24 then flat
- Continued focus on safety
- Maintaining overall reliability levels
- Supporting the energy transformation
 - Step increases in transformation programs – SPS, AMI, undergrounding
- Balancing customer needs and affordability
 - Higher investment than in the AA4 period but the price impact on customers will be offset by market conditions that reduce the cost of financing the investment.



Since the proposal.....

Financial environment has changed:

- Higher interest rates
 - +2.3% increase in risk free rate
- Higher inflation forecasts
 - +4.3% at June 2022 then +1% thereafter
- Subsequent WACC increase (WP proposed method)
 - 4.7% to 6.4%

Capital project considerations

- No issues with Western Power's strategic response to transformation and the programs included in the proposal
- Step changes in activity compared to AA4 actuals raises concerns about deliverability
- Mindful of Government priorities – AMI and SPS



SPS and undergrounding

- Significant step changes in activity compared to AA4:
 - 8-fold increase for SPS
 - 4-fold increase for undergrounding
- Concerns with deliverability and efficiency given:
 - Level of activity achieved in AA4
 - Supply chain constraints and tight labour market
 - 'Early stage' cost information – longer term costs/efficiencies not yet known
- Need to balance risk for customers and WP:
 - Reduced costs in draft decision – consultant recommendation
 - Both programs in IAM - flexibility such that customers are protected by only paying for what Western Power delivers, and also that Western Power is funded if it delivers the programs efficiently and more quickly.

AMI

- Accumulation meters will be replaced with AMI – issue is the timing
- \$20 million difference in NPV of replacing by end AA5 or 2032
- Enabler for transformation program
- Proposed AMI funding approved, requested clarification on:
 - Inclusion of contingency
 - Quantification of expected benefits



Other capex

Other asset replacement:

- -\$165m to \$747m
- Aligns with AA4 actual expenditure
- Proposed replacement not supported by actual asset condition

SCADA/Comms IT and Cyber:

- -\$256m to \$616m
- Double AA4 actual expenditure
- Significantly higher than comparable companies in NEM.
- Not supported by increase in failure rate or strong supporting business cases

Corporate support:

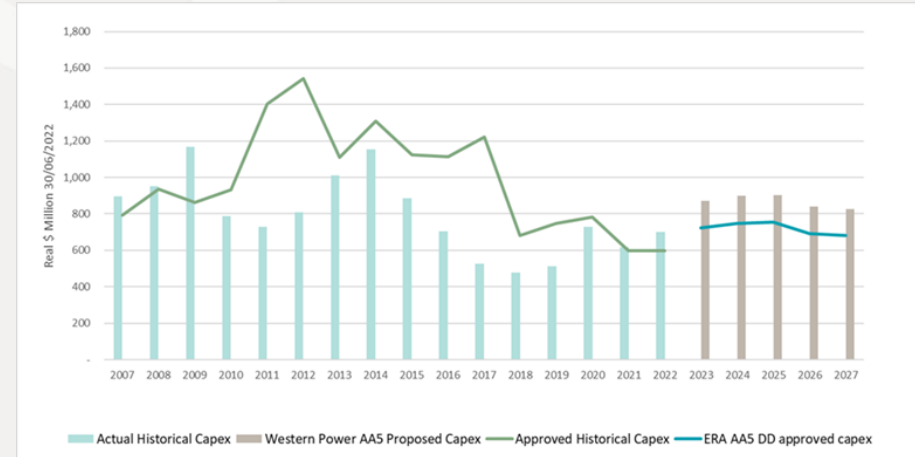
- -\$31m to \$115m
- Significant element of the forecast depot program allocated to 'unplanned activities'



Capex summary

	AA5 Draft	AA5 Proposed	AA4 actual
Growth	441	436	385
Compliance	443	440	335
Asset repl*	2,091	2,441	1,534
SCADA and IT	616	872	438
Corp support	121	152	243
Total net capex	3,712	4,341	2,935

* Asset replacement includes undergrounding and SPS (in IAM so values can change) and AMI



Economic Regulation Authority

Component	Western Power proposed	Draft decision
<i>Averaging period</i>	<i>30 June 2021</i>	<i>30 June 2022</i>
Return on debt (%)		
5-year interest rate swap (effective yield) (%)	N/A	4.070
Debt risk premium (10-year average) (%)	N/A	1.883
Debt issuing cost (%)	0.100	0.165
Debt hedging cost (%)	N/A	0.123
Return on debt (10-year bond yield) (%)	3.80*	N/A
<i>Nominal return on debt (%)</i>	<i>3.90*</i>	<i>6.241</i>
Return on equity		
Nominal <u>risk free</u> rate (%)	1.53	3.82
Market risk premium (%)	6.0	6.2
Equity beta	0.7	0.7
<i>Nominal return on equity (%)</i>	<i>5.73</i>	<i>8.16</i>
Other parameters		
Debt proportion (%)	55	55
Inflation (%)	2.03	2.96
Corporate tax (%)	30	30
Franking credit (%)	50	50
Nominal after-tax WACC (%)	4.73*	7.10
Real after-tax <u>WACC</u> (%)	2.64*	4.03

ERA agrees with most parameters:

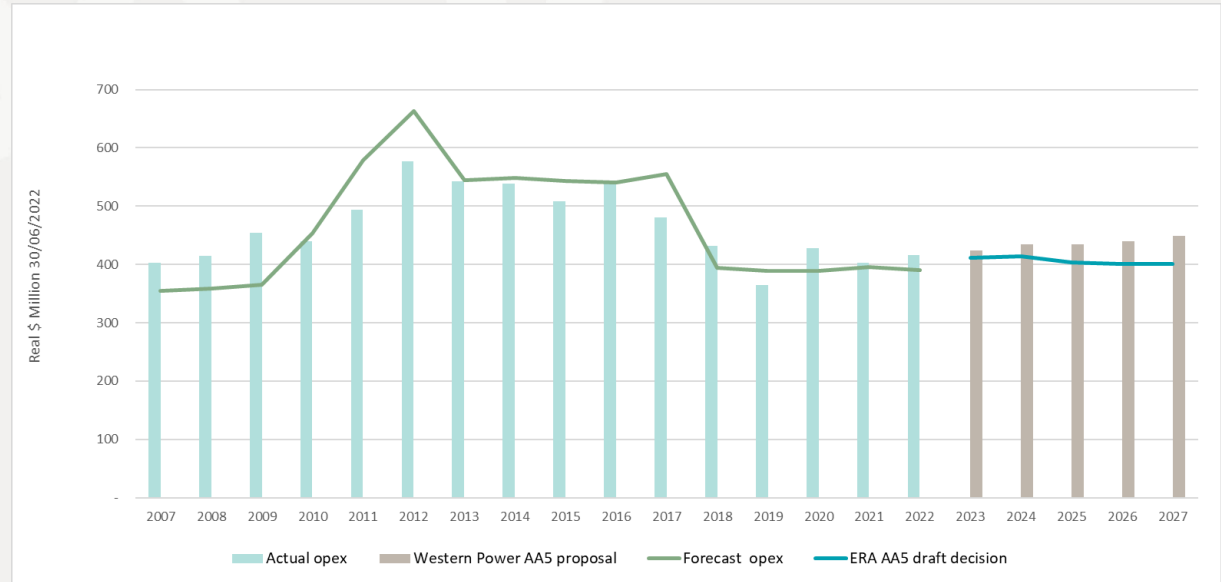
- credit rating, gearing ratio, term of debt, term for equity, equity beta, forecast inflation, updated for current data, value of imputation credits (gamma).

Has retained hybrid trailing average approach to cost of debt:

- Higher but more certain debt costs over AA5

Operating costs

- -7% real reduction
- Accepted most step changes, **recognising uncertainty** from transformation
- Did not accept opex for silicon treatment – not required under ESO.
- Capitalised line decommissioning costs over 1 year



2% productivity factor (0.25% proposed)

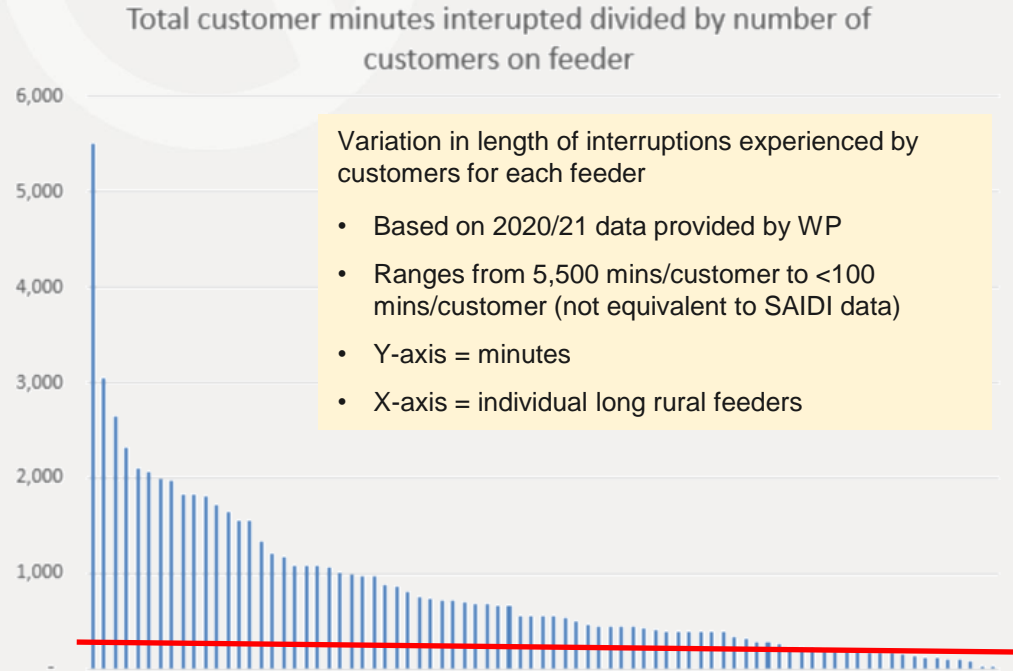
- Expect efficiencies over the period
- Consistent with efficiency documented by other NSPs

Service Standards

- Some areas experience poor reliability
- Approach informed by regional visits and Michelle Shepherd report
- Single standard (targets become benchmarks)
- Raised rural long target to legislative standard in NQR code (290 minutes)
- More granular reporting
- Discuss policy options with EPWA



Economic Regulation Authority



Network Tariffs: What we need from Western Power

To inform our final decision, Western Power now needs to:

- Update the cost allocation and forecast revenue for each reference tariff to reflect the most recent actual and forecast energy and customer numbers and revised target revenue.
- Take account of stakeholder concerns about the effect of rebalancing between fixed and variable charges to develop a more gradual transition.
- Include sufficient information for customers to understand the proposed prices for 2023/24 and how the components of each tariff are forecast to change over the AA5 period, including the likely effect on customers with a range of consumption profiles.
- Modify the proposed tariffs for storage and electric vehicle charging reference services to address the matters raised by stakeholders in submissions on the additional information published on 30 June.

Western Power's proposal



Large-scale network investment to support transformation

Driven by



Rapidly evolving technology

Decarbonisation



More frequent and severe climate events



Costed at a time of low inflation and interest rates

The ERA's considerations

The need for Western Power to support ongoing industry transformation.

Capex/Opex

- Deliverability concerns given step changes in activity.
- Shortcomings in Western Power's supporting evidence.

-14% Real reduction in capital costs



Expenditure for key transformation programs (SPS and undergrounding) linked to delivery

-7% Real reduction in operating costs

Return on investment

Financial uncertainty. Significant changes since Western Power submitted its proposal:

+2.3% Higher annual risk free rate

+4.3% Inflation in June 2022 and +1% thereafter

+2.4% Increase in cost of capital

Services

- Areas of poor service and confusion about the standards that apply.
- Outdated and lack of information on tariffs.



Simplified service standard framework.



Raised rural long benchmark to meet statutory requirements.



Requirement for updated and greater information on tariffs.

The ERA's draft decision

Higher revenue allowance
\$9 billion

(13.5% higher than proposed)

Increased network prices

7.5% to 8% annually

Clearer service standards

More certainty on tariffs during AA5

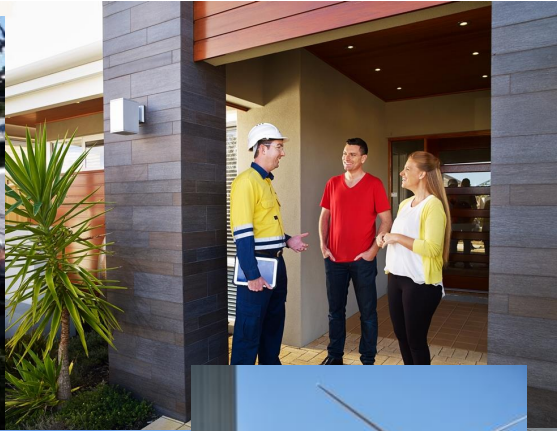
Q&A Slido.com

#9309511

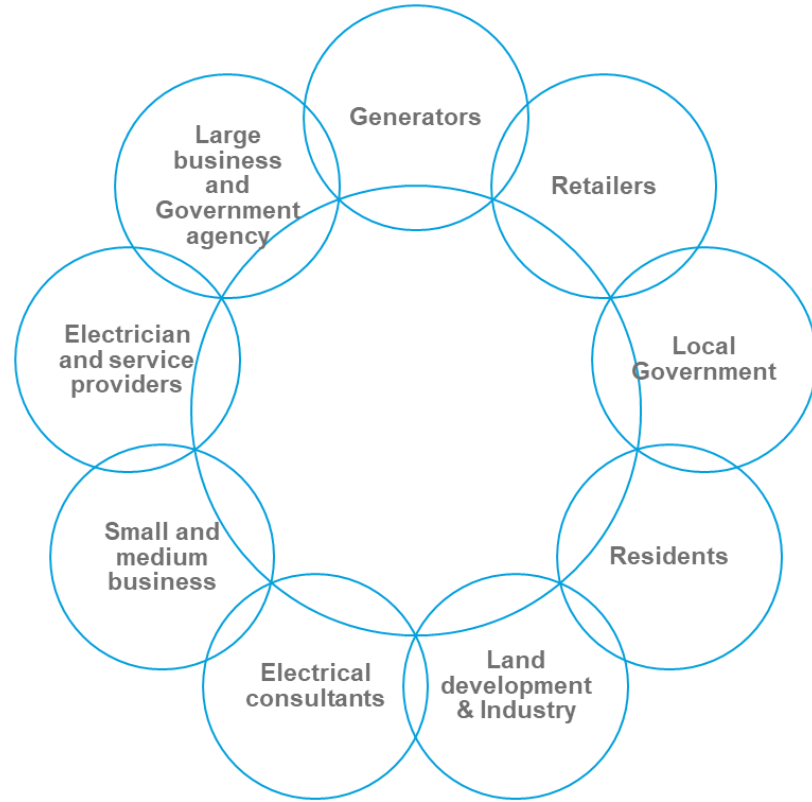
3

Western Power's update

Western Power



Our AA5 engagement



More than 2,000 customers engaged, reflecting over 800 hours of engagement

Network challenges are growing

Network challenges	AA3	Today (AA4)	AA5	Trend
Residential Solar PV	-	1,800 MW	3,000 MW	↑
Behind-the-meter Battery Storage	-	40 MW	700 MW	↑
Renewable generation ¹	9%	30%	~40%	↑
Maximum Demand	4,053 MW	4,223 MW	4,360 MW	↑
Minimum Demand ²	1,593 MW	856 MW	[<600 MW]	↓
Customers connected	1.113M	1.162M	1.297M	↑
Average age of assets – poles (yrs)	28	28	28	-
Average age of assets – conductors (yrs)	38	42	39	-

¹ As a percentage of total generation

² Trend continuing downwards rapidly and Western Power continues to work with AEMO and Energy Policy WA on associated implications

Our AA5 proposal

Customers seek four key outcomes



**Continued focus
on safety**



**Reliable
supply**



**Facilitating more
renewables**



**Affordable price
outcomes**



enabled via the transition to a modular grid

Improve resilience to extreme climate events

Adopt new technology that better supports customers

Improve use of technology to support two-way energy flows, remote supply, storage, and communication

The evolving landscape



Provide reliable supply

- network supply reliability continues to be challenged
- disruptions to planned works program
- climate change-related weather events expected to continue (frequency and severity)



Decarbonising our community

- Adaption, mitigation and electrification
- increased stakeholder support for climate action
- electrification efforts expected to increase
- interim emissions target expected with support required for network augmentation

Underpinned by safety as a fundamental value



Next steps

- Western Power's response to the Draft Decision due 15 November 2022.
- Western Power is working through the Draft Decision and will undertake further targeted engagement to complement our response.
- Western Power Public Forum – Following submission of response to the Draft Decision (~Mid November)
- Please contact the AA5 team if you have any questions. aa5@westernpower.com.au



Perth office

363 Wellington Street
Perth, WA 6000

westernpower.com.au



Q&A Slido.com

#9309511

4

Closing remarks

What's next

- Western Power will submit a revised proposal by 15 November 2022.
- Public submissions on the draft decision and Western Power's revised proposal will close on 16 December 2022.
- The ERA expects to release its final decision in March 2023.

The draft decision and all related documents are published on the ERA's website: www.erawa.com.au/AA5



Our team is always available to talk further. Please contact Electricity.Access@ERAWA.com.au.