



Economic Regulation Authority

Final decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27

Attachment 1: Price control and target revenue

31 March 2023

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Note

This attachment forms part of the ERA's final decision on proposed revisions to the access arrangement for the Western Power Network for the fifth access arrangement period (AA5). It should be read with all other parts of the final decision.

The final decision comprises all of the following attachments:

Final decision on proposed revisions to the access arrangement for the Western Power network 2022/23 – 2026/27 – Decision Overview

Attachment 1 – Price control and target revenue (this document)

Attachment 2 – Regulated asset base

Attachment 3A – AA4 capital expenditure

Attachment 3B – AA5 capital expenditure

Attachment 4 – Depreciation

Attachment 5 – Return on regulated asset base

Attachment 6 – Operating expenditure

Attachment 7 – Other components of target revenue

Attachment 8 – Services

Attachment 9 – Service standard benchmarks and adjustment mechanism

Attachment 10 – Expenditure incentives and other adjustment mechanisms

Attachment 11 – Network tariffs

Attachment 12 – Policies and contracts

1. Summary

This attachment deals with the following matters:

- the form of the price control
- the total target revenue requirement.

The “price control” determines the target revenue Western Power can earn during the access arrangement period. The price control must meet the objectives in section 6.4 of the Access Code. The objectives include giving Western Power the opportunity to earn sufficient revenue (“target revenue”) for the access arrangement period to meet the forward-looking and efficient costs of providing regulated services, including a return on investment commensurate with the commercial risks involved.

Historically, as permitted under the Access Code, target revenue has been determined using a building block approach incorporating the following elements:

- operating costs
- depreciation
- return on the regulated capital base¹
- taxation.

The Access Code specifies additional items that, if applicable, are included in target revenue for the access arrangement period:

- Tariff equalisation contributions (TEC) – funds collected from users of the Western Power network to subsidise the operations of Horizon Power.
- “Deferred revenue” a prescribed amount set out in the Access Code in relation to AA2 target revenue that was deferred in the AA2 access arrangement for recovery in future access arrangement periods.²
- Advanced Metering Infrastructure (AMI) communications expenditure incurred prior to 30 June 2022.³
- A demand management innovation allowance.
- Incentive payments (or penalties) and other adjustments from the previous access arrangement (AA4) including:
 - Sharing operating cost efficiencies between Western Power and customers (gain sharing mechanism).
 - Rewards or penalties for service standard performance (service standard adjustment mechanism).
 - Adjusting for differences between forecast and actual capital expenditure for specified investment categories.

¹ The regulated capital base represents the capital investment in regulated assets and is calculated by adding capital expenditure to and deducting depreciation from the opening regulated asset base.

² As at the end of AA4, the remaining balance to be recovered was forecast to be \$497.8 million (\$ real as at 30 June 2017).

³ Advanced metering infrastructure of \$115.36 million (real dollar values as at 30 June 2017) to be recovered over AA5 and AA6.

- Unrecovered costs arising from unforeseen events (force majeure).
- Expenditure arising from changes to the Technical Rules.
- Operating expenditure incurred from deferring/substituting a capital expenditure project, such as network control services or for demand-management initiatives (D-factor).⁴
- Regulatory reform expenditure incurred during AA4 to support preparation of the initial whole of system plan and the development of network constraints information.

The ERA's draft decision required an amendment to Western Power's price control and reduced Western Power's proposed target revenue.

In its corrected revised proposal, Western Power did not accept the amendment to the price control and proposed a higher level of target revenue and increases to prices.⁵

Summary of final decision on the form of the price control and target revenue.

- Western Power's proposed form of price control is consistent with the framework and approach document except in relation to the treatment of revenue for the 2022/23 financial year. The ERA requires Western Power to remove the proposed adjustment for under/over recovery of revenue for the 2022/23 financial year.
- The ERA has not accepted Western Power's revised proposed target revenue. The ERA's final decision on each component of the building blocks to determine Western Power's total target revenue for AA5, compared with Western Power's initial proposal, the draft decision and Western Power's revised proposal is set out in Table 1 below.
- The ERA's final decision on the smoothed target revenue amounts for each year of the access arrangement period and indicative effects on average prices is set out in Table 2 below.

⁴ The D-factor is not a specific requirement of the Access Code but has formed part of Western Power's access arrangement since AA2.

⁵ The revenue model submitted with Western Power's revised proposal on 14 November 2022 contained errors that resulted in an understatement of target revenue and price increases. Western Power submitted a corrected model on 18 January 2023. This summary refers to the values in the corrected model.

Table 1 Final decision on target revenue for AA5 (\$ million real at June 2022)

	Final decision	Corrected revised proposal	Draft decision	Western Power initial proposal	Attachment reference
Operating costs	2,047.0	2,250.3	2,032.0	2,182.5	Attachment 6
Depreciation	2,533.1	2,558.5	2,471.5	2,496.3	Attachment 4
Return on regulated asset base	2,470.0	2,312.1	2,300.9	1,488.0	Attachment 5
Return on working capital	58.4	58.2	56.9	35.3	Attachment 7
Taxation	175.3	143.0	156.1	122.4	Attachment 7
Investment adjustment mechanism	(41.0)	(40.9)	(41.3)	(39.2)	Attachment 7
Service standard adjustment mechanism	(54.8)	(54.6)	(46.1)	(44.2)	Attachment 9
D-factor	41.5	41.4	43.9	42.2	Attachment 7
Gain sharing mechanism	26.1	26.1	52.3	48.1	Attachment 7
Deferred revenue recovery	238.8	229.5	229.5	182.9	Attachment 7
Tariff Equalisation Contribution (TEC)	827.2	825.6	873.6	897.4	Attachment 7
Demand management innovation allowance	6.6	6.6	6.4	5.9	Attachment 7
Advanced meter infrastructure recovery	82.4	81.1	71.2	66.6	Attachment 7
Regulatory reform costs	3.4	3.4	2.7	2.7	Attachment 7
Target revenue unsmoothed	8,414.0	8,440.2	8,209.6	7,486.9	

Source: ERA analysis; ERA and Western Power target revenue models

Table 2: Final decision smoothed target revenue for AA5 (nominal prices)

	2022/23	2023/24	2024/25	2025/26	2026/27
Final decision					
Unsmoothed target revenue \$ million	1,646	1,733	1,813	1,909	1,998
Smoothed target revenue \$ million	1,626	1,718	1,812	1,922	2,030
Change in average prices based on forecast energy delivered	0.0%	7.1%	7.3%	7.6%	7.8%
Western Power corrected revised proposal					
Unsmoothed target revenue \$ million	1,619	1,742	1,846	1,961	2,069
Smoothed target revenue \$ million	1,630	1,738	1,842	1,957	2,068
Change in average prices based on forecast energy delivered	0%	8.2%	8.1%	8.1%	8.2%
Draft decision					
Unsmoothed target revenue \$ million	1,648	1,701	1,787	1,876	1,963
Smoothed target revenue \$ million	1,576	1,678	1,790	1,911	2,044
Change in average prices based on forecast energy delivered	0%	7.5%	7.7%	7.8%	7.9%
Western Power proposal					
Unsmoothed target revenue \$ million	1,495	1,513	1,583	1,644	1,727
Smoothed target revenue \$ million	1,576	1,602	1,593	1,585	1,576
Change in average prices based on forecast energy delivered	0.0%	3.7%	0.0%	0.0%	0.0%

Source: ERA analysis; ERA and Western Power target revenue models

The reasons for the ERA's final decision in respect of the matters relevant to the form of price control and the requirements in relation to total target revenue and details of relevant required amendments are set out in this attachment.

2. Form of price control

The access arrangement must include a price control that determines target revenue.⁶

An extract of the Access Code provisions relevant to the price control has been included in Appendix 1.

The price control approved for AA4 was a modified revenue cap.

The ERA's decision on the form of the price control, as set out in its framework and approach document published on 9 August 2021, was that the form of price control in Western Power's current access arrangement for AA4 should be retained with the following amendments:

- a single price control would be set⁷
- the side constraint would be removed.⁸

The unchanged aspects of the price control in the current access arrangement are:

- The calculation of target revenue is based on total costs using the building block method as contained in the revenue model target revenue calculation approved in the ERA's final decision for AA4.
- The price control formula includes a separate value for the TEC so that it can be updated each year to reflect the actual amount gazetted by the Government.
- For each annual reference tariff update during the access arrangement period, Western Power must ensure that the forecast target revenue from reference tariffs, based on the forecast customer numbers, energy volumes and other charging parameters for each reference service consistent with the demand forecast approved for the access arrangement period, is equal to the target revenue determined by the price control formula.
- There is no adjustment for any under-recovery or over-recovery of actual revenue compared with forecast revenue from previous years except in respect of the TEC. An adjustment for under or over recovery of the TEC is permitted so that Western Power can recover the gazetted amount payable as permitted under the Access Code.
- The target revenue values included in the access arrangement are amended each year to reflect the change in the weighted average cost of capital for the annual debt risk premium update to reflect the hybrid trailing average cost of debt approach.

The target revenue determined by the price control applies to all network access services that Western Power provides to transmit and distribute electricity, whether they are a reference services or non-reference services. These services, which can be either a reference or non-reference service, include:

- connection services
- exit services

⁶ "Price control" is defined in section 1.3 of the Access Code as meaning the provisions in an *access arrangement* under section 5.1(d) and Chapter 6 which determine *target revenue*.

⁷ The current access arrangement included separate price controls for the transmission and distribution network.

⁸ The side constraint restricted the change for each tariff to be no more than two per cent above the overall average change in tariffs.

- entry services
- bi-directional services
- standard metering services
- streetlight maintenance.

The current access arrangement specifies that charges for non-target revenue services are negotiated in good faith, consistent with the Access Code objective and reasonable.⁹

In addition, the current access arrangement specifies that charges for access applications must be consistent with Western Power's Applications and Queuing Policy and charges for extended metering services (within the meaning of the Model Service Level Agreement) must be consistent with the Model Service Level Agreement and clause 6.6(1)(e) of the *Electricity Industry (Metering) Code 2012*.

2.1 Western Power's initial proposal

Western Power proposed the following revisions to the form of price control and target revenue in the current access arrangement to reflect the requirements in the framework and approach document:

- Clause 5.1.3 has been amended to require a single revenue target for the combined transmission and distribution systems.
- Clauses 5.7, 5.8 and 5.9 to 5.11 have been combined into a single clause, 5.7, consistent with the framework and approach requirement that there be a single price control.
- Clauses 6.5.11 to 6.5.14 in the current access arrangement, that dealt with the side constraint provisions, have been deleted to reflect the requirement in the framework and approach that a side constraint will no longer apply.

In addition, Western Power proposed revisions to:

- Clause 5.7 to include its proposed target revenue amounts for AA5.
- Clause 6.4 to include the pricing years for the AA5 period and the forecast customer numbers, energy volumes and other charging parameters that it proposes will be used to calculate forecast target revenue for the annual price list updates during AA5.
- Clause 5.7.3 to include an additional term in the price control formula so that any under or over recovery of target revenue for the 2022/23 financial year against the forecast assumed in the model target revenue calculation is adjusted in the 2024/25 price list update.

⁹ As per clause 5.1.2. Clause 5.1.1 of the current access arrangement defines "non-revenue target services" as:

- a) *non-reference services* provided by Western Power by means of the *Western Power Network* other than *non-reference services* that are provided as *revenue target services*.
- b) *reference services* described as *reference services* (ancillary) in Appendix E
- c) *reference service* (metering) M16 as set out in Appendix E.

2.2 Submissions on initial proposal

A submission on the form of the price control was received from Synergy. Synergy considered:

- Removal of the side-constraint should be contingent upon Western Power demonstrating compliance with the requirements in section 7.3H(c) of the Access Code to minimise distortions to price signals for efficient usage.
- The forecast customer numbers, energy volumes and other charging parameters should be listed by reference tariff rather than by customer segment.
- Inclusion of the proposed adjustment for under/over recovery of revenue in the 2022/23 financial year is not consistent with the framework and approach.

These matters are discussed further below in section 2.3.

2.3 Draft decision

In considering Western Power's proposal as to the form of price control the ERA:

- Assessed whether the proposed form of price control is compliant with the price control objectives in section 6.4 and the requirements in Chapter 6.
- Had regard to the Access Code objective.
- Assessed whether it complies with the form of price control in the framework and approach document.
- Had regard to submissions received from stakeholders.

Western Power's proposal to include an adjustment for under/over recovery of revenue in the 2022/23 financial year was a departure from the framework and approach document. The ERA did not consider that there had been a material change in circumstances warranting the proposed departure and noted that Western Power had not provided reasons for the departure.

The draft decision noted that the form of price control decided by the ERA in the framework and approach did not include any adjustments for over or under recovery of target revenue against forecast. A key feature of this form of price control, as set out in the ERA's final decision for AA4 and restated in the framework and approach, is that it ensures Western Power is exposed to demand risk rather than guaranteeing it a fixed level of revenue and passing on the costs (or returning revenue) to users. This provides strong incentives for Western Power to encourage the connection of new customers, retain existing customers and offer services that meet user requirements. The need to manage demand risk also incentivises Western Power to set more efficient tariffs that assist it to manage demand on the network and its consequent costs.

The draft decision noted that the ERA's final decision on AA5 would not be made until part way through the first year of the AA5 access arrangement period. Consequently, the 2022/23 revenue would not reflect the ERA's determination of target revenue for AA5. The draft decision noted the ERA would account for this in its final decision in March 2023 by subtracting Western Power's latest forecast revenue for the 2022/23 financial year from the approved total target revenue for the AA5 period to determine the amounts of target revenue that would need to be recovered over the remaining four years of the access arrangement period. The

additional adjustment proposed by Western Power for under/over recovery of revenue against forecast is inconsistent with the form of price control determined in the framework and approach.

The ERA required the following amendment to Western Power's proposal.

Draft Decision Required Amendment 1

Clause 5.7.3 must be amended to remove the proposed adjustment for under/over recovery of revenue for the 2022/23 financial year.

Synergy submitted that removal of the side-constraint should be contingent upon Western Power demonstrating compliance with the requirement in section 7.3H(c) of the Access Code. Section 7.3H(c) requires compliance with sections 7.3H(a) and 7.3H(b) of the Access Code in a way that minimises distortions to the price signals for efficient usage that would result from reference tariffs that comply with the pricing principle set out in section 7.3G. As the ERA decided in the framework and approach paper that the side constraint was to be removed, the removal of the side-constraint cannot be contingent on the requirement in section 7.3H(c) of the Access Code. In any event, the ERA cannot approve the access arrangement unless it is satisfied that Western Power has met the requirement section 7.3H(c).

Western Power revised clause 6.4 of its current access arrangement to include forecast customer numbers, energy volumes and other charging parameters that it proposes will be used to calculate forecast revenue for the annual price list updates during AA5. Synergy submitted that the information should be provided by reference tariff rather than by customer segment. The ERA considered that providing the information by customer segment is sufficient to ensure that forecast revenue used in the annual price list updates is consistent with the demand forecast approved in the access arrangement. However, the ERA noted that there were formatting and data errors in the proposed revisions to clause 6.4 of the proposed revised access arrangement and the values needed to be updated to reflect accurately the most recent demand forecast available at the time of the final decision and to remove formatting errors.

The ERA required the following amendment to Western Power's proposal.

Draft Decision Required Amendment 2

Clause 6.4 of the proposed revised access arrangement must be amended to reflect the most recent demand forecast available prior to the final decision and to remove formatting errors.

With the exception of the proposed revenue adjustment for the 2022/23 financial year and amendments required to the forecasts in clause 6.4 of the proposed revised access arrangement, the ERA was satisfied that the proposed form of price control met the requirements in the Access Code and was consistent with both the price control objectives and Access Code objective.

2.4 Western Power's revised proposal

In its revised proposal, Western Power has not accepted draft decision required amendment one. Western Power considers there should be an adjustment based on actual revenue received in the year ended 30 June 2023, as proposed in its initial proposal. It considers this adjustment is required due to the target commencement date of AA5 being 1 July 2023 and the Framework and Approach decision that Western Power's current price list will apply until the revised access arrangement comes into effect.

Western Power has accepted draft decision required amendment two that required it to amend the access arrangement to reflect the most recent demand forecast available and remove formatting errors.

2.5 Submissions on the revised proposal and draft decision

Synergy and the Australian Energy Council both supported the draft decision required amendments.

In relation to required amendment two, Synergy considers that Western Power's revised proposal contains a more accurate energy demand forecast that reflects Synergy's view that energy demand will increase in AA5 relative to AA4.

However, Synergy considers that Western Power should also publish its peak demand forecast. Synergy considers that without a published peak demand forecast, market participants cannot understand matters such as:

- Whether it is appropriate for the electric vehicle charger tariff to include a demand charge.
- How Western Power derived the growth and capacity expansion expenditure related elements of its proposed expenditure.

Synergy considered that users should be given the opportunity to make submissions to the ERA, informed by the peak demand forecast, prior to making its final decision.

2.6 Considerations of the ERA

For the reasons set out in the draft decision, the ERA has maintained draft decision required amendment one.

The form of price control decided by the ERA in the framework and approach does not include any adjustments for over or under recovery of actual revenue against forecast revenue. A key feature of this form of price control is that it ensures Western Power is exposed to demand risk rather than guaranteeing it a fixed level of revenue and passing on the costs (or returning revenue) to users. This provides strong incentives for Western Power to encourage the connection of new customers, retain existing customers and offer services that meet user requirements. The need to manage demand risk also incentivises Western Power to set more efficient tariffs that assist it to manage demand on the network and its consequent costs.

As explained in the draft decision, the ERA's final decision is being made part way through the first year (2022/23) of the AA5 access arrangement period (1 July 2022 to 30 June 2027). The final decision determines the target revenue requirement for the five-year period. To calculate the revenue that will need to be recovered over the four years from 2023/24 to 2026/27, the ERA has subtracted Western Power's most recent forecast revenue for the 2022/23 financial year from the total target revenue for the five-year period determined in this final decision.

The ERA has ensured that the sum of Western Power's forecast revenue for 2022/23 and the annual target revenues set for the remaining four years of the AA5 period is equivalent in net present value terms to the target revenue requirement for the full five-year period.

The additional adjustment proposed by Western Power for under/over recovery of actual revenue during 2022/23 against its latest forecast for 2022/23 is inconsistent with the form of price control determined in the framework and approach.

Western Power is no worse off, and is potentially better off, than it would have been if there had not been a delay to the AA5 process. This is because it has had the opportunity to update its revenue forecast for the first year of the access arrangement (2022/23) partway through the 2022/23 year. If there had not been a delay, the forecast for 2022/23 would have been locked in three months prior to it commencing (March 2022).

Required Amendment 1

Clause 5.7.3 must be amended to remove the proposed adjustment for under/over recovery of revenue for the 2022/23 financial year.

The ERA is satisfied that Western Power has complied with draft decision required amendment two.

In relation to the points raised by Synergy about the peak demand forecast, Western Power submitted a peak demand forecast with its further access arrangement information on 18 January 2023. This information was published on the ERA website on 19 January 2023.

The ERA notes that inclusion of a demand component in the electric vehicle charging tariff is independent of a peak demand forecast being provided. Peak demand is a key driver of network costs, so it would be appropriate to include demand-based charges in any network tariff.

Western Power is forecasting a relatively flat forecast peak demand at system level in the medium term, so it has not requested any expenditure in relation to increases in peak demand at system level.

3. Target revenue

3.1 Western Power's initial proposal

A breakdown of Western Power's initial proposed target revenue for AA5 is set out in Table 3 below.

Table 3 Western Power initial proposed target revenue for AA5 (\$ million real at June 2022)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Operating costs	423.9	434.9	434.3	440.1	449.6	2,182.7
Depreciation	435.0	455.8	500.5	532.6	572.6	2,496.4
Return on regulated asset base	310.1	299.5	295.5	292.4	290.5	1,488.0
Return on working capital	8.1	7.3	7.0	6.6	6.3	35.3
Taxation	40.3	23.6	21.4	17.9	19.2	122.4
Investment adjustment mechanism	(39.2)					(39.2)
Service standard adjustment mechanism	(44.2)					(44.2)
D-factor	42.2					42.2
Gain sharing mechanism	48.1					48.1
Deferred revenue recovery	38.2	37.1	36.4	35.8	35.4	182.9
Tariff Equalisation Contribution	185.2	180.6	180.8	177.2	173.6	897.4
Demand management innovation allowance	1.1	1.1	1.2	1.2	1.2	5.9
Advanced meter infrastructure recovery	13.5	13.4	13.3	13.2	13.2	66.6
Regulatory reform costs	2.6					2.6
Target revenue unsmoothed	1,464.8	1,453.2	1,490.2	1,517.0	1,561.7	7,486.9

Source: Derived from Western Power AA5 Regulatory Revenue Model.

Before developing individual tariffs, Western Power proposed to smooth its target revenue over the access arrangement period as shown in Table 4 below.

Table 4: Western Power initial proposed smoothed target revenue for AA5 (\$ million nominal)

		2022/23	2023/24	2024/25	2025/26	2026/27
Unsmoothed target revenue	\$ million	1,494.6	1,512.8	1,582.9	1,644.0	1,726.8
Smoothed target revenue	\$ million	1,576.4	1,601.9	1,593.5	1,585.0	1,576.6
Change in average prices based on forecast energy delivered	%	0%	3.7%	0%	0%	0%

Source: Derived from Western Power AA5 Regulatory Revenue Model

Western Power proposed an increase in overall prices in 2023/24 and then no change in overall prices for the remainder of the AA5 period.

As noted above, the TEC is included as a separate variable in the pricing formula. Consequently, the target revenue amounts set out in Table 39 of the proposed revised access arrangement exclude the TEC as shown in Table 5 below.

Table 5: Western Power initial proposed target revenue amounts in Table 39 of its proposal (\$ million real at June 2022)

	2022/23	2023/24	2024/25	2025/26	2026/27
Total smoothed target revenue	1,545.1	1,538.8	1,500.2	1,462.6	1,425.9
Less: Tariff Equalisation Contribution	(185.2)	(180.6)	(180.8)	(177.2)	(173.6)
Target revenue specified in the access arrangement	1,359.9	1,358.2	1,319.4	1,285.4	1,252.3

Source: Derived from Western Power AA5 Regulatory Revenue Model

3.2 Submissions on initial proposal

A submission on the price path over the access arrangement period was made by WACOSS. WACOSS considered that a smoother price path over the AA5 period would be preferable to a one-off increase in 2023/24. WACOSS submitted that it is typically easier for consumers to respond to price movements that are introduced gradually. WACOSS noted that a step-change risks creating price shock for consumers. For a low-income household, this can increase the challenges of managing their already stretched income.

3.3 Draft decision

The ERA determined the total amount of target revenue taking into account determinations and required amendments of individual elements of target revenue as set out in its draft decision.

The amount of target revenue determined by the ERA in the draft decision is set out in Table 6 below. The relevant attachment that contains the ERA's consideration and determination of each building block component of target revenue is included in the table.

Table 6 Draft decision total target revenue for AA5 (\$ million real at June 2022)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total	Attachment number
Operating costs	411.7	414.4	403.9	400.6	401.3	2,032.0	Attach 6
Depreciation	446.9	464.1	494.8	522.5	543.2	2,471.5	Attach 4
Return on regulated asset base	437.1	449.1	461.4	472.8	480.5	2,300.9	Attach 5
Return on working capital	11.3	10.7	11.1	11.6	12.2	56.9	Attach 7
Taxation	37.6	27.6	29.1	29.8	31.9	156.1	Attach 7
Investment adjustment mechanism	(41.3)					(41.3)	Attach 7
Service standard adjustment mechanism	(46.1)					(46.1)	Attach 9
D-factor	43.9					43.9	Attach 7
Gain sharing mechanism	52.3					52.3	Attach 7
Deferred revenue recovery	45.9	45.9	45.9	45.9	45.9	229.5	Attach 7
Tariff Equalisation Contribution	183.6	177.3	175.9	170.9	165.9	873.6	Attach 7
Demand management innovation allowance	1.2	1.3	1.3	1.3	1.3	6.4	Attach 7
Advanced meter infrastructure recovery	14.2	14.2	14.2	14.2	14.2	71.2	Attach 7
Regulatory reform costs	2.7					2.7	Attach 7
Target revenue unsmoothed	1,601.1	1,604.6	1,637.6	1,669.7	1,696.5	8,209.6	

Source: ERA target revenue model

In the draft decision, the ERA updated the profile of smoothed target revenue to reflect the changes to the building block components of unsmoothed target revenue as set out in Table 7 below. The net present value of the smoothed target revenue over the AA5 period is equal to the unsmoothed target revenue. Section 6.4(c) of the Access Code requires the price control in an access arrangement to have the objective of, among other things, minimising, as far as reasonably possible, the variance between expected revenue for the last pricing year in the access arrangement period and the target revenue for that last pricing year. The ERA considered that the smoothed target revenue met the objective in section 6.4(c) of the Access Code.

Table 7: Draft decision smoothed target revenue for AA5

		2022/23	2023/24	2024/25	2025/26	2026/27
Nominal prices:						
Unsmoothed target revenue	\$ million	1,648.4	1,701.0	1,787.4	1,876.4	1,962.9
Smoothed target revenue	\$ million	1,576.4	1,678.8	1,790.1	1,911.5	2,044.2
Change in average prices based on forecast energy delivered	%	0%	7.5%	7.7%	7.8%	7.9%

Source: ERA target revenue model

The change in average prices shown in Table 7 was indicative only and based on Western Power's proposed forecast demand. The draft decision noted that forecast demand would be updated in the final decision. The nominal change in prices is also subject to actual CPI at the time the annual price list is updated.

As the final decision on Western Power's access arrangement revisions will not be made until 31 March 2023, any changes to customer prices will come into effect in the second pricing year of AA5, 2023/24. Consequently, the smoothed target revenue for 2022/23 is based on forecast revenue. The draft decision noted that forecast revenue would be updated in the final decision to reflect the most recent forecast available.

The corresponding target revenue amounts for Table 39 of the proposed access arrangement are shown in Table 8 below.

Table 8: Draft decision target revenue amounts for Table 39 of the Access Arrangement (\$ million real at June 2022)

	2022/23	2023/24	2024/25	2025/26	2026/27
Total smoothed target revenue	1,531.1	1,583.7	1,640.1	1,701.0	1,766.8
Less: Tariff Equalisation Contribution	(183.6)	(177.3)	(175.9)	(170.9)	(165.9)
Target revenue specified in the access arrangement	1,347.5	1,406.4	1,464.2	1,530.1	1,600.9

Source: ERA target revenue model

The draft decision required:

Required Amendment 3

The target revenue amounts in Table 39 of the proposed access arrangement must be amended to reflect the ERA's draft decision.

3.4 Western Power's revised proposal

In its revised proposal submitted on 14 November 2022, Western Power proposed alternative target revenue values that were lower than the values included in the ERA's draft decision. In addition, Western Power noted in its revised proposal that it was forecasting a significantly lower average price over the AA5 period than the draft decision (3.3 per cent versus 7.7 per cent in the draft decision) due to inclusion of its most recent demand forecast.

The ERA identified errors in the model submitted by Western Power that had resulted in target revenue and forecast price changes being understated in the revised proposal. Western Power corrected these errors in its further access arrangement information submitted on 18 January 2023. The numbers below are based on the corrected model.

A breakdown of Western Power's corrected revised proposed target revenue, compared with the draft decision and initial proposal, is set out in Table 9 below.

Table 9 Corrected revised proposed target revenue for AA5 (\$ million real at June 2022)

	2022/23	2023/24	2024/25	2025/26	2026/27	Revised proposal total	Draft decision	Initial proposal
Operating costs	437.9	447.3	449.9	456.2	459.0	2,250.3	2,032.0	2,182.7
Depreciation	453.3	478.9	508.6	543.9	574.0	2,558.5	2,471.5	2,496.4
Return on regulated asset base	434.2	447.3	462.4	477.8	490.3	2,312.1	2,300.9	1,488.0
Return on working capital	11.9	11.0	11.4	11.7	12.2	58.2	56.9	35.3
Taxation	28.6	26.7	27.5	28.9	31.3	143.0	156.1	122.4
Investment adjustment mechanism	(40.9)					(40.9)	(41.3)	(39.2)
Service standard adjustment mechanism	(54.6)					(54.6)	(46.1)	(44.2)
D-factor	41.4					41.4	43.9	42.2
Gain sharing mechanism	26.1					26.1	52.3	48.1
Deferred revenue recovery	45.9	45.9	45.9	45.9	45.9	229.5	229.5	182.9
Tariff Equalisation Contribution	168.0	168.9	167.7	162.8	158.2	825.6	873.6	897.4
Demand management innovation allowance	1.2	1.3	1.3	1.4	1.4	6.6	6.4	5.9
Advanced meter infrastructure recovery	16.2	16.2	16.2	16.2	16.2	81.1	71.2	66.6
Regulatory reform costs	3.4					3.4	2.7	2.6
Target revenue unsmoothed	1,572.6	1,643.4	1,690.9	1,744.8	1,788.6	8,440.2	8,209.6	7,486.9

Source: Derived from Western Power AA5 Regulatory Revenue Model.

In its corrected revised proposal, Western Power proposed to smooth its target revenue over the access arrangement period as shown in Table 10 below.

Table 10: Western Power corrected revised proposed smoothed target revenue for AA5 (\$ million nominal)

		2022/23	2023/24	2024/25	2025/26	2026/27
Unsmoothed target revenue	\$ million	1,619.2	1,742.1	1,845.5	1,960.7	2,069.4
Smoothed target revenue	\$ million	1,629.7	1,738.1	1,841.9	1,957.2	2,068.5
Change in average prices based on forecast energy delivered		0.0%	8.20%	8.1%	8.1%	8.2%

Source: Derived from Western Power AA5 Regulatory Revenue Model

The target revenue amounts set out in Table 39 of the proposed revised access arrangement excluding the TEC are shown in Table 11 below.

Table 11: Western Power corrected revised proposed target revenue amounts in Table 39 of its proposal

	2022/23	2023/24	2024/25	2025/26	2026/27
Total smoothed target revenue (\$ million nominal)	1,629.7	1,738.1	1,841.9	1,957.2	2,068.5
Less: Tariff Equalisation Contribution (\$ million nominal)	(173.0)	(179.0)	(183.0)	(183.0)	(183.0)
Smoothed target revenue excluding TEC (\$ million nominal)	1,456.7	1,559.1	1,658.9	1,774.2	1,885.5
Target revenue specified in the access arrangement (\$ million real at June 2022)	1,414.8	1,470.7	1,519.9	1,578.9	1,629.6

Source: Derived from Western Power AA5 Regulatory Revenue Model

3.5 Submissions on the revised proposal and draft decision

No submissions were received on total target revenue.

3.6 Considerations of the ERA

The ERA has determined the total amount of target revenue taking into account determinations and required amendments of individual elements of target revenue as set out in its final decision.

The amount of target revenue determined by the ERA in the final decision is set out in Table 12 below. The relevant attachment that contains the ERA's consideration and determination of each building block component of target revenue is included in the table.

Table 12 Final decision total target revenue for AA5 (\$ million real at June 2022)

	2022/23	2023/24	2024/25	2025/26	2026/27	Total	Attachment number
Operating costs	422.2	416.2	405.6	402.3	400.8	2,047.0	Attach 6
Depreciation	454.5	476.8	503.5	535.6	562.7	2,533.1	Attach 4
Return on regulated asset base	470.5	479.9	493.9	507.5	518.2	2,470.0	Attach 5
Return on working capital	11.8	11.0	11.4	11.8	12.3	58.4	Attach 7
Taxation	34.7	32.9	34.0	35.8	38.0	175.3	Attach 7
Investment adjustment mechanism	(41.0)					(41.0)	Attach 7
Service standard adjustment mechanism	(54.8)					(54.8)	Attach 9
D-factor	41.5					41.5	Attach 7
Gain sharing mechanism	26.1					26.1	Attach 7
Deferred revenue recovery	47.9	47.7	47.7	47.7	47.7	238.8	Attach 7
Tariff Equalisation Contribution	170.6	164.4	165.8	165.3	161.1	827.2	Attach 7
Demand management innovation allowance	1.3	1.3	1.3	1.3	1.4	6.6	Attach 7
Advanced meter infrastructure recovery	16.5	16.5	16.5	16.5	16.5	82.4	Attach 7
Regulatory reform costs	3.4					3.4	Attach 7
Target revenue unsmoothed	1,605.1	1,646.7	1,679.7	1,723.8	1,758.8	8,414	

Source: ERA target revenue model

The ERA has updated the profile of smoothed target revenue to reflect the changes to the building block components of unsmoothed target revenue as set out in Table 13 below. The net present value of the smoothed target revenue over the AA5 period is equal to the unsmoothed target revenue. Section 6.4(c) of the Access Code requires the price control in an access arrangement to have the objective of, among other things, minimising, as far as reasonably possible, the variance between expected revenue for the last pricing year in the access arrangement period and the target revenue for that last pricing year. The ERA considers that the smoothed target revenue meets the objective in section 6.4(c) of the Access Code.

Table 13: Final decision smoothed target revenue for AA5

		2022/23	2023/24	2024/25	2025/26	2026/27
Nominal prices:						
Unsmoothed target revenue	\$ million	1,646.5	1,732.8	1,813.1	1,908.7	1,997.6
Smoothed target revenue	\$ million	1,625.9	1,717.8	1,811.8	1,921.8	2,030.4
Change in average prices based on forecast energy delivered	%	0.0%	7.1%	7.3%	7.6%	7.8%

Source: ERA target revenue model

The change in average prices shown in Table 13 is indicative only and based on Western Power's forecast energy volumes over the AA5 period. As flagged in the draft decision, the smoothed target revenue for 2022/23 is based on Western Power's latest forecast revenue for 2022/23.

The nominal change in prices is also subject to actual CPI at the time the annual price list is updated. For the 2023/24 price list, which must be submitted by Western Power by 26 April, the overall forecast change in tariffs is 7 per cent.

In the access arrangement, target revenue is specified in June 2022 real dollars. The TEC is excluded from the target revenue specified in the access arrangement because it is a separate component in the price control formula. The final decision target revenue amounts for Table 45 (previously Table 39) of the access arrangement are shown in Table 14 below.

Table 14: Final decision target revenue amounts for Table 45 of the Access Arrangement

	2022/23	2023/24	2024/25	2025/26	2026/27
Total smoothed target revenue (\$ million nominal)	1,625.9	1,717.8	1,811.8	1,921.8	2,030.4
Less: Tariff Equalisation Contribution (\$ million nominal)	(175.0)	(173.0)	(179.0)	(183.0)	(183.0)
Smoothed target revenue excluding TEC (\$ million nominal)	1,450.9	1,544.8	1,632.8	1,738.8	1,847.4
Target revenue specified in Table 45 of the access arrangement (\$ million real at June 2022)	1,414.4	1,468.1	1,512.7	1,570.4	1,626.5

Source: ERA target revenue model

For each annual price list, the maximum revenue Western Power can collect from network tariffs is calculated by:

- Updating target revenue to reflect the annual debt risk premium update.
- Indexing the real dollar target revenue specified in the access arrangement by the actual CPI reported for the December period immediately preceding the relevant price list year.
- Adding the TEC based on the amount gazetted for the pricing year.
- Adjusting for any over or under recovery of TEC from the previous year.

Western Power must ensure the total revenue based on its proposed prices for the relevant year is no greater than the maximum revenue calculated as described above.

To ensure Western Power is exposed to demand risk, the revenue for price list purposes must be based on customer numbers and volumes consistent with the demand forecast provided with the access arrangement. This ensures any variation in revenue due to differences between actual demand and forecast demand in the access arrangement is borne by Western Power rather than customers.

Required Amendment 2

The target revenue amounts in Table 45 of the revised proposed access arrangement must be amended to reflect the ERA's final decision.

Appendix 1 Code Extract – Price control

The specific requirements and objectives for the price control and determining target revenue are set out in sections 6.1 to 6.5 to the Access Code (these sections are reproduced below):

- Sections 6.1 and 6.2 of the Access Code provides that any form of price control may be adopted provided it meets the objectives in section 6.4 and otherwise complies with Chapter 6 of the Access Code. Section 6.3 of the Access Code constrains the choice of price control for the first access arrangement period, which is not relevant to the proposed revised access arrangement.
- Section 6.4 of the Access Code sets out objectives for price control in relation to the setting of an amount of target revenue for the access arrangement period.
- Section 6.5 of the Access Code clarifies that the target revenue amount determined to meet the forward-looking and efficient costs of providing covered services is a target amount only (and not a ceiling or a floor amount).

Form of Price control

6.1 Subject to section 6.3, an *access arrangement* may contain any form of *price control* provided it meets the objectives set out in section 6.4 and otherwise complies with this Chapter 6.

6.2 Without limiting the forms of *price control* that may be adopted, *price control* may set *target revenue*:

(a) by reference to the *service provider's approved total costs*; or

{Note: This includes “revenue cap” *price controls* based on controlling total revenue, average revenue or revenue yield and “price cap” *price controls* based on cost of service.}

(b) by setting *tariffs* with reference to:

(i) *tariffs* in previous *access arrangement periods*; and

(ii) changes to costs and productivity growth in the electricity industry;

{Note: This includes “price cap” *price controls* based on controlling the weighted average of *tariffs* or individual *tariffs*.}

or

(c) using a combination of the methods described in sections 6.2(a) and 6.2(b).

Price control objectives

6.4 The *price control* in an *access arrangement* must have the objectives of:

(a) giving the *service provider* an opportunity to earn revenue (“**target revenue**”) for the *access arrangement period* from the provision of *covered services* as follows:

(i) an amount that meets the forward-looking and efficient costs of providing *covered services*, including a return on investment commensurate with the commercial risks involved;

plus

(ii) for *access arrangements* other than the *first access arrangement*, an amount in excess of the revenue referred to in section 6.4(a)(i), to the extent necessary to reward the *service provider* for efficiency gains and innovation beyond the *efficiency and innovation benchmarks* in a

previous *access arrangement* or to penalise the *service provider* for efficiency losses derived from a failure to meet the *efficiency and innovation benchmarks* in a previous *access arrangement*,

{Note: The presence of section 6.4(a)(ii) provides incentive to a *service provider* during an *access arrangement period* to pursue efficiency gains and innovation beyond the *efficiency and innovation benchmarks* in the *access arrangement*, because the *service provider* may be rewarded in the calculation of the *target revenue* for subsequent *access arrangement periods*.}

plus

- (iiA) an amount (if any) determined under sections 6.5A to 6.5E;¹⁰ plus
- (iiB) an amount (if any) determined under sections 6.5F to 6.5J;¹¹ plus
- (iii) an amount (if any) determined under section 6.6;¹² plus
- (iv) an amount (if any) determined under section 6.9;¹³ plus
- (v) an amount (if any) determined under an *investment adjustment mechanism* (see sections 6.13 to 6.18);

plus

- (vi) an amount (if any) determined under a *service standards adjustment mechanism* (see sections 6.29 to 6.32);

plus –

- (vii) an amount (if any) determined under section 6.37A;¹⁴

and

- (b) enabling a *user* to predict the likely annual changes in *target revenue* during the *access arrangement period*; and
- (c) minimising, as far as reasonably possible, variance between expected revenue for the last *pricing year* in the *access arrangement period* and the *target revenue* for that last *pricing year*.

6.5 The amount determined in seeking to achieve the objective specified in section 6.4(a)(i) is a target, not a ceiling or a floor.

¹⁰ Section 6.5A to 6.5E – Recovery of deferred revenue.

¹¹ Section 6.5F to 6.5J – Recovery of advanced metering communications infrastructure expenditure.

¹² Section 6.6 – Target revenue may be adjusted for unforeseen events.

¹³ Section 6.9 – Target revenue may be adjusted for technical rule changes.

¹⁴ Section 6.37A – Tariff equalisation contributions may be added to target revenue.