DRAFT DECISION

AusNet Services
Transmission Determination
2022 to 2027

Attachment 1
Maximum allowed revenue

June 2021

Note

This attachment forms part of the AER's draft decision on AusNet Services' 2022–27 transmission determination. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Demand management innovation allowance mechanism

Attachment 12 – Pricing methodology

Attachment 13 – Pass through events

Attachment 14 – Negotiating framework

Contents

1 Maximum allowed revenue

This attachment sets out our draft decision on AusNet Services' maximum allowed revenue (MAR) for the provision of prescribed transmission services over the 2022–27 regulatory control period. Specifically, it sets out our draft decision on:[1]

- the estimated total revenue cap, which is the sum of the annual expected MAR
- the annual building block revenue requirement
- the annual expected MAR
- the X factor.

We determine AusNet Services' annual building block revenue requirement using a building block approach. We determine the X factors by smoothing the annual building block revenue requirement over the regulatory control period. The X factor is used in the CPI–X methodology to determine the annual expected MAR.

1.1 Draft decision

We determine a total annual building block revenue requirement of $2838.1 million ($nominal, unsmoothed) for AusNet Services for the 2022–27 regulatory control period. Our determination represents a reduction of $47.0 million ($nominal) or 1.6 per cent to AusNet Services' proposal and reflects the impact of our draft decisions on the various building block costs. For the reasons discussed in the attachments to this draft determination, our decisions on AusNet Services' proposed building block costs have a consequential impact on its annual building block revenue requirement.

We determine the annual expected MAR (smoothed) and X factor for each regulatory year of the 2022–27 regulatory control period by smoothing the annual building block revenue requirement. Our draft decision is to approve an estimated total revenue cap of $2837.8 million ($nominal) for AusNet Services for the 2022–27 regulatory control period. Our approved X factor for 2023–24 to 2026–27 is 1.50 per cent per annum.[2]

Table 1.1 sets out our draft decision on AusNet Services' annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap for the 2022–27 regulatory control period.

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[1]   NER, cll. 6A.4.2(a)(1)–(3), 6A.5.3(c) and 6A.6.8.

[2]   AusNet Services is not required to apply an X factor for 2022–23 because we set the 2022–23 MAR in this decision.

Table 1.1   AER's draft decision on AusNet Services' annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Return on capital	168.7	166.8	166.1	165.1	162.2	828.9
Regulatory depreciation[a]	114.3	97.9	107.2	116.9	124.0	560.2
Operating expenditure[b]	268.8	274.2	279.8	285.6	291.4	1399.8
Revenue adjustments[c]	18.4	8.6	7.0	5.2	−1.2	38.0
Net tax amount	3.2	1.5	1.7	2.5	2.3	11.2
Annual building block revenue requirement (unsmoothed)	573.4	548.9	561.8	575.3	578.8	2838.1
Annual expected MAR (smoothed)	**562.3**	**564.9**	**567.5**	**570.2**	**572.9**	**2837.8**[d]
X factor (%)[e]	n/a[f]	1.50	1.50	1.50	1.50	n/a

Source: AER analysis.

(a)   Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.

(b)   Includes debt raising costs.

(c)   Includes revenue adjustments from the efficiency benefit sharing scheme (EBSS), the capital expenditure sharing scheme (CESS), a shared assets adjustment and the demand management innovation allowance mechanism (DMIAM).

(d)   The estimated total revenue cap is equal to the total annual expected MAR.

(e)   The X factors will be revised to reflect the annual return on debt update. Under the CPI–X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.

(f)   AusNet Services is not required to apply an X factor for 2022–23 because we set the 2022–23 MAR in this decision. The MAR for 2022–23 is around 1.14 per cent lower than the approved MAR for 2021–22 in real terms, or 0.83 per cent higher in nominal terms.

1.2 AusNet Services' proposal

AusNet Services proposed a total (smoothed) revenue cap of $2882.6 million ($nominal) for the 2022–27 regulatory control period.

Table 1.2 sets out AusNet Services' proposed annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap.

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
Return on capital	159.2	157.7	156.9	155.6	152.3	781.7
Regulatory depreciation[a]	109.6	94.2	104.3	114.6	122.4	545.1
Operating expenditure[b]	292.7	298.1	303.6	310.2	316.9	1521.5
Revenue adjustments[c]	17.0	8.3	6.7	4.9	−1.4	35.6
Net tax amount	1.1	0.0	0.0	0.0	0.0	1.1
Annual building block revenue requirement (unsmoothed)	579.7	558.3	571.5	585.4	590.3	2885.1
Annual expected MAR (smoothed)	**579.7**	**578.1**	**576.5**	**574.9**	**573.4**	**2882.6**[d]
X factor (%)[e]	n/a[f]	2.47%	2.47%	2.47%	2.47%	n/a

Source: AusNet Services, *Revenue Proposal 2023–27, Post Tax Revenue Model - Revised*, 18 February 2021.

(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.

(b) Includes debt raising costs.

(c) Includes revenue adjustments from EBSS, CESS and a shared assets adjustment.

(d) The estimated total revenue cap is equal to the total annual expected MAR.

(e) The X factors will be revised to reflect the annual return on debt update. Under the CPI–X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.

(f) AusNet Services is not required to apply an X factor for 2022–23 because we set the 2022–23 MAR in this decision.

1.3 Assessment approach

In this section, we describe the building block approach used to determine AusNet Services' expected MAR. We also set out the annual revenue adjustment to be applied to AusNet Services' MAR over the 2022–27 regulatory control period.

1.3.1   The building block approach

The MAR is calculated using the post-tax revenue model (PTRM).[3] The PTRM must be such that the expected MAR for each year of the regulatory control period is equal to the net present value (NPV) of the annual building block revenue requirement.[4] The total revenue cap is the sum of the MARs for the period.[5] In turn, the annual building block revenue requirement must be determined using a building block approach.[6] Therefore, we adopt a building block approach when making our decision on AusNet

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[3] NER, cll. 6A.5.1 and 6A.5.3.

[4] NER, cl. 6A.5.3(c)(1).

[5] NER, cl. 6A.5.3(c)(4).

[6] NER, cl. 6A.5.4.

Services' total revenue cap and expected MAR for each regulatory year of the regulatory control period. Under this approach we determine the value of the building block costs that make up the annual building block revenue requirement for each regulatory year. These building block costs are set out in section 1.3.2.

We developed the PTRM, which brings together the various building block costs and calculates the annual building block revenue requirement for each year of the regulatory control period.[7] The PTRM also calculates the X factors required under the CPI–X methodology which is used to escalate the MAR for each year (other than the first year) of the regulatory control period.[8] Using the X factors and annual building block revenue requirement, the annual expected MAR (smoothed) is forecast for each year of the regulatory control period. AusNet Services' revenue proposal must be prepared using our PTRM.[9] Our draft decision used version 5 of the PTRM, which was published after AusNet Services submitted its revenue proposal.[10] This new version of the PTRM gives effect to the changes set out in the AER's final position paper on the treatment of inflation in its regulatory framework.[11]

The annual building block revenue requirement can be lumpy over the regulatory control period. To minimise price shocks, revenues are smoothed within a regulatory control period while maintaining the principle of cost recovery under the building block approach. Smoothing requires diverting some of the cost recovery to adjacent years within the regulatory control period so that the NPV of the annual expected MAR (smoothed revenues) is equal to the NPV of the annual building block revenue requirement (unsmoothed revenues). That is, a smoothed profile of the expected MAR is determined for the regulatory control period under the CPI–X methodology.

The expected MAR for the first year is generally set equal to the annual building block revenue requirement for the first year of the regulatory control period. It may be appropriate to set the expected MAR for the first year to align with the MAR from the last year of the previous regulatory control period to avoid any large revenue variation between periods (or P_0):[12]

$$MAR_1 = AR_1 \text{ or } MAR_L$$

where:

MAR_1 = the maximum allowed revenue for year 1 of the regulatory control period

AR_1 = the annual building block revenue requirement for year 1 of the regulatory control period

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[7] NER, cl. 6A.5.

[8] NER, cll. 6A.5.3 and 6A.6.8.

[9] NER, cl. 6A.5.1(a).

[10] AER, *Electricity transmission network service providers: Post-tax revenue model (version 5)*, 7 April 2021.

[11] AER, *Final position: Regulatory treatment of inflation*, 17 December 2020, pp. 6–8.

[12] The MAR for year 1 of the next regulatory control period may include adjustment for the performance incentive that applied during the previous regulatory control period, and under or over recovery adjustments from previous regulatory years.

MAR$_L$ ~ the maximum allowed revenue for the last year of the previous regulatory control period.

To enable the formula for the annual revenue adjustment process (discussed below in section 0) to operate correctly, we will refer to the MAR determined in this decision using the building block costs as the allowed revenue (AR). This is because the expected MAR determined using the building block costs do not incorporate performance incentive scheme revenue adjustments and pass through amounts that may apply to each regulatory year.

In this determination for AusNet Services, we first calculate annual building block revenue requirements for each year of the 2022–27 regulatory control period. To do this we consider the various costs facing AusNet Services and the trade-offs and interactions between these costs, service quality and across years. This reflects our holistic assessment of AusNet Services' proposal.

We understand the trade-offs that occur between building block costs and test the sensitivity of these costs to their various driver elements. These trade-offs are discussed in the interrelationships section of the various attachments to this draft decision and are reflected in the calculations made in the PTRM.[13] Such understanding allows us to exercise judgement in determining the final inputs into the PTRM and the annual building block revenue requirements that result from this modelling.

Having determined the total annual building block revenue requirement for the 2022–27 regulatory control period, we smooth the annual building block revenue requirements for each regulatory year across that period. This step reduces revenue variations between years, and calculates the expected MAR and X factor for each year.[14] The X factors equalise (in NPV terms) the total expected revenue cap to be earned by AusNet Services with the total building block revenue requirement for the 2022–27 regulatory control period.[15] They must minimise, as far as reasonably possible, the variance between the expected MAR and annual building block revenue requirement for the last regulatory year of the period.[16] By minimising this divergence, it helps to manage the prospect of a significant revenue change (and consequently prices) between the last year of the 2022–27 regulatory control period, and first year of the following 2027–32 regulatory control period. We consider a divergence of up to 3 per cent between the expected MAR and annual building block revenue requirement for the last year of the regulatory control period is reasonable, if this can promote smoother price changes over the regulatory control period.

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[13] There are trade-offs that are not modelled in the PTRM but are reflected in the inputs to the PTRM. For example, service quality is not explicitly modelled in the PTRM, but the trade-offs between service quality and price are reflected in the forecast capex and opex inputs to the model. Other trade-offs are obvious from the calculations in the PTRM. For example, while it may be expected that a lower regulatory asset base would also lower revenues, the PTRM shows that this will not occur if the reduction in the regulatory asset base is due solely to an increase in the depreciation rate. In such circumstances, revenues increase as the increased depreciation amount more than offsets the reduction in the return on capital caused by the lower regulatory asset base.

[14] NER, cl. 6A.6.8(a).

[15] NER, cl. 6A.6.8(c)(1).

[16] NER, cl. 6A.6.8(c)(2).

The building block costs (and the elements that drive those costs) used to determine the unsmoothed annual building block revenue requirements are set out in section 1.3.2.

1.3.2 The building block costs

The efficient costs to be recovered by AusNet Services can be thought of as being made up of various building block costs. Our draft decision assesses each of the building block costs and the elements that drive these costs. The building block costs are approved reflecting trade-offs and interactions between the cost elements, service quality and across years.

Table 1.3 shows the building block costs that form the annual building block revenue requirement for each year and where discussion on the elements that drive these costs can be found within this draft decision.

Table 1.3   Building block costs

Building block costs	Attachments where elements are discussed
Return on capital	Regulatory asset base (attachment 2)
	Rate of return (attachment 3)
	Capital expenditure (attachment 5)
Regulatory depreciation (return of capital)	Regulatory asset base (attachment 2)
	Regulatory depreciation (attachment 4)
	Capital expenditure (attachment 5)
Operating expenditure	Operating expenditure (attachment 6)
Estimated cost of corporate tax	Corporate income tax (attachment 7)
Other revenue adjustments	
Adjustment for shared assets	Maximum allowed revenue (attachment 1)
Operating efficiency benefits/penalties	Efficiency benefit sharing scheme (attachment 8)
Capital efficiency benefits/penalties	Capital expenditure sharing scheme (attachment 9)
Demand management innovation allowance	Demand management innovation allowance mechanism (attachment 11)

1.3.3　Annual revenue adjustment process

The PTRM incorporates an expected inflation rate to calculate the expected MAR (excluding performance incentive scheme revenue adjustments and pass through amount that may apply to each regulatory year) in nominal dollar terms, whereas the actual MAR from the second year onwards is adjusted for actual inflation. As discussed in the *Rate of return instrument*, we will update AusNet Services' return on debt annually.[17] This means the actual MAR from the second year onwards will also be adjusted for revised X factors after the annual return on debt update. This annual revenue adjustment process is set out below.

The MAR for the subsequent year of the regulatory control period requires an annual adjustment based on the previous year's allowed revenue.[18] That is, the subsequent year's allowed revenue is determined by adjusting the previous year's allowed revenue for actual inflation and the X factor determined after the annual return on debt update:

$$AR_t = AR_{t-1} \times (1 + \Delta CPI) \times (1 - X_t)$$

where:

AR	=	the allowed revenue
t	=	time period/financial year (for t = 2 (2023–24), 3 (2024–25), 4 (2025–26), 5 (2026–27))
ΔCPI	=	the annual percentage change in the ABS Consumer price index all groups, weighted average of eight capital cities from September in year $t-2$ to September in year $t-1$
X	=	the smoothing factor determined in accordance with the PTRM as approved in the AER's final decision, and annually revised for the return on debt update in accordance with the formula specified in the *Rate of return instrument* calculated for the relevant year.[19]

The MAR is determined annually in accordance with the NER by adding to (or deducting from) the allowed revenue:

- the service target performance incentive scheme revenue increment (or revenue decrement)[20]

- any approved pass through amounts.[21]

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[17]　AER, *Rate of return instrument*, December 2018, note 29.

[18]　In the case of making the annual adjustment for year 2, the previous year's AR would be the same as the approved smoothed revenue for year 1 as contained in the PTRM.

[19]　AER, *Rate of return instrument*, December 2018, cl. 9.

[20]　NER, cl. 6A.7.4.

[21]　NER, cll. 6A.7.2 and 6A.7.3.

Table 1.4 sets out the timing of the annual calculation of the AR and performance incentive:

$$\text{MAR}_t \quad = \quad \text{(allowed revenue)} + \text{(performance incentive)} + \text{(pass through)}$$

$$= \quad \text{AR}_t + \left(\left(\text{AR}_{t-2} \times \frac{3}{12} \right) + \left(\text{AR}_{t-1} \times \frac{9}{12} \right) \right) \times \text{S}_{ct} + \text{P}_t$$

where:

MAR	=	the maximum allowed revenue
AR	=	the allowed revenue
S	=	the revenue increment or decrement determined in accordance with the service target performance incentive scheme
P	=	the pass through amount (positive or negative) that the AER has determined in accordance with clauses 6A.7.2 and 6A.7.3 of the NER
t	=	time period/financial year (for t = 2 (2023–24), 3 (2024–25), 4 (2025–26), 5 (2026–27))
ct	=	time period/calendar year (for ct = 2 (2022), 3 (2023), 4 (2024), 5 (2025)).

AusNet Services may also adjust the MAR for under or over-recovery amounts.[22] That is, if the revenue amounts earned from providing prescribed transmission services in previous regulatory years are higher or lower than the sum of the approved MAR for those years, the difference can be included in the subsequent year's MAR. In the case of an under-recovery, the amount is added to the subsequent year's MAR. In the case of an over-recovery, the amount is subtracted from the subsequent year's MAR.

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[22] NER, cl. 6A.23.3(e)(5).

Table 1.4   Timing of the calculation of allowed revenues and the performance incentive for AusNet Services

t	Allowed revenue (financial year)	ct	Performance incentive (calendar year)
2	1 July 2023–30 June 2024	2	1 January 2022–31 December 2022
3	1 July 2024–30 June 2025	3	1 January 2023–31 December 2023
4	1 July 2025–30 June 2026	4	1 January 2024–31 December 2024
5	1 July 2026–30 June 2027	5	1 January 2025–31 December 2025

Note: The performance incentive for 1 January 2021–31 December 2021 is to be applied to the AR determined for 2022–23 (AR_1).

We are not required to determine the transmission charges for AusNet Services. Nonetheless, we provide the indicative transmission charges (and the resulting impact on annual electricity bills) that flow from this revenue determination as discussed in section 1.4.3.
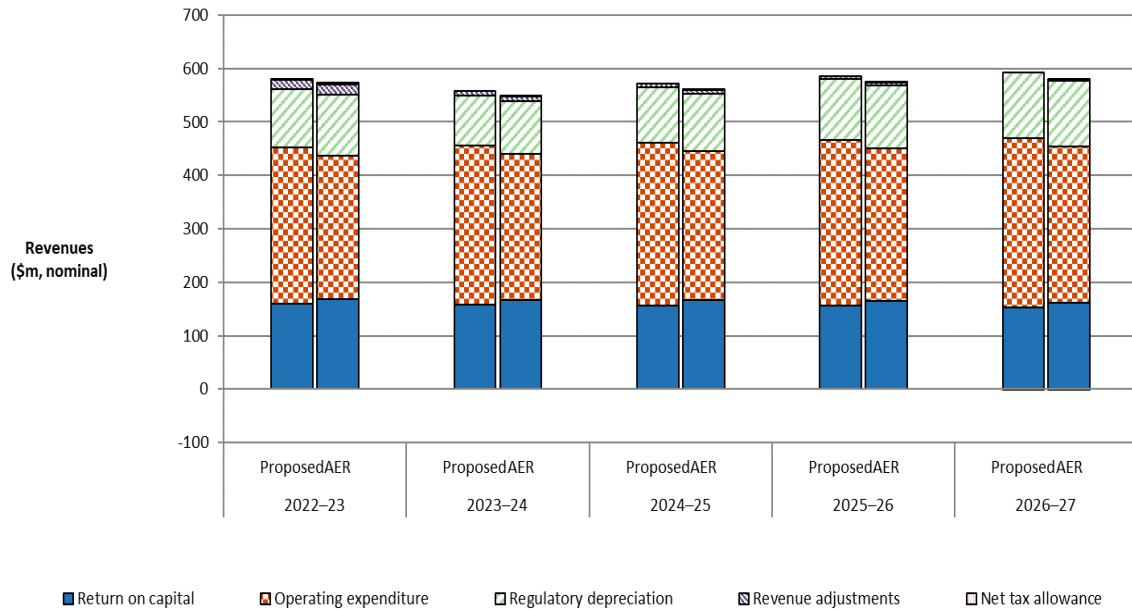
1.4 Reasons for draft decision

We determine a total annual building block revenue requirement of $2838.1 million ($nominal) for AusNet Services for the 2022–27 regulatory control period. This is a reduction of $47.0 million ($nominal) or 1.6 per cent to AusNet Services' proposed total annual building block revenue requirement of $2885.1 million ($nominal) for this period. This reflects the impact of our draft decision on the various building block costs.

Figure 1.1 shows the building block components from our determination that make up the annual building block revenue requirement for AusNet Services, and the corresponding components from its proposal.

The changes we made to AusNet Services' proposed building blocks include (in nominal terms):

- an increase in the return on capital of $47.2 million or 6.0 per cent (attachments 2, 3 and 5)

- an increase in the regulatory depreciation of $15.1 million or 2.8 per cent (attachment 4)

- a reduction in the operating expenditure (opex) forecast of $121.7 million or 8.0 per cent (attachment 6)

- an increase in the cost of corporate income tax of $10.1 million or 877.8 per cent (attachment 7)

- an increase in the revenue adjustments of $2.5 million or 6.9 per cent (attachments 8, 9 and 11).

Figure 1.1 AER's draft decision and AusNet Services' proposed annual building block revenue requirement ($million, nominal)

Source: AusNet Services, *Revenue proposal 2022–27, Post Tax Revenue Model Revised, 18 February 2021*; AER analysis.

Note: Revenue adjustments include EBSS, CESS, shared assets adjustment and DMIAM amounts. Opex includes debt raising costs.

1.4.1 X factor, annual expected MAR and estimated total revenue cap

For this draft decision, we determine an X factor for AusNet Services of 1.50 per cent per annum for the four years of the regulatory control period from 2023–24 to 2026–27.[23] The NPV of the annual building block revenue requirement is $2483.6 million ($nominal) as at 1 July 2022. Based on this NPV and applying the CPI–X method, we determine that the annual expected MAR (smoothed) for AusNet Services is $562.3 million in 2022–23 increasing to $572.9 million in 2026–27 ($nominal). The resulting estimated total revenue cap for AusNet Services is $2837.8 million for the 2022–27 regulatory control period.

Figure 1.2 shows our draft decision on AusNet Services' annual expected MAR (smoothed revenue) and the annual building block revenue requirement (unsmoothed revenue) for the 2022–27 regulatory control period.

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[23] AusNet Services is not required to apply an X factor for 2022–23 because we set the 2022–23 MAR in this decision.

Figure 1.2 AER's draft decision on AusNet Services' revenue for the 2022–27 regulatory control period ($million, nominal)
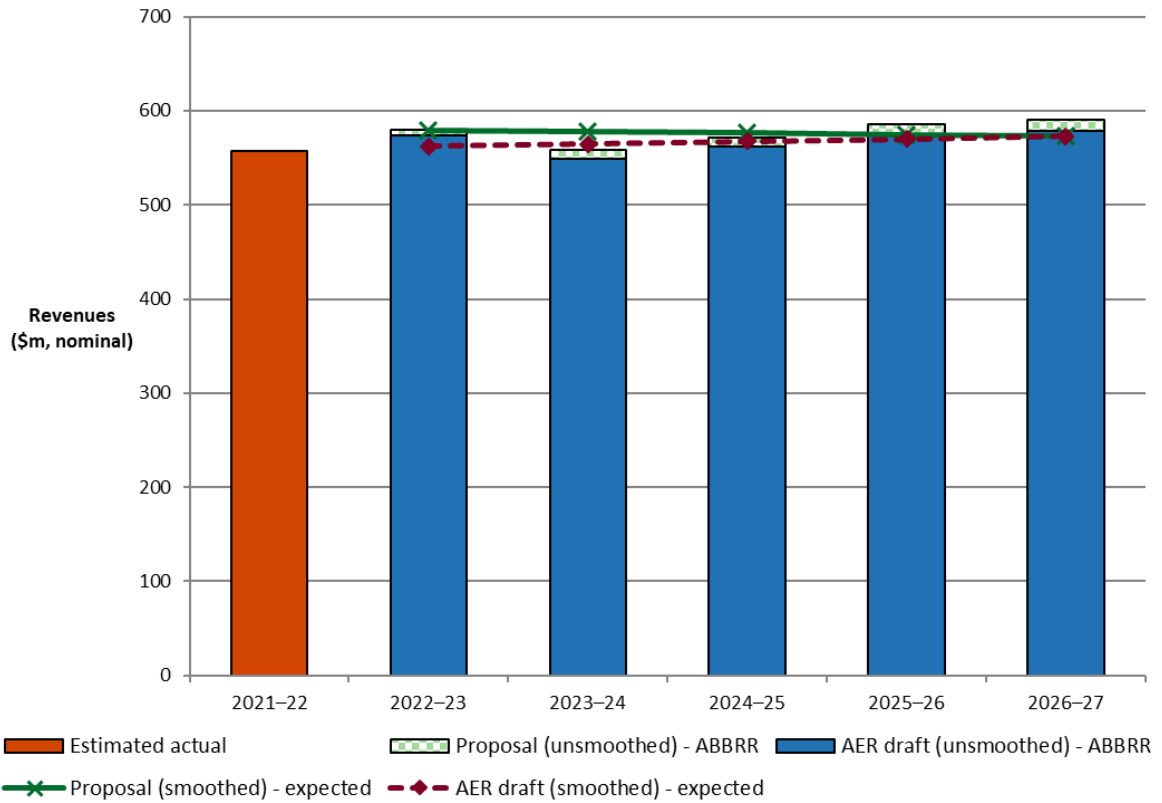
Source: AER analysis.

Note: Annual building block revenue requirement (ABBRR).

To determine the expected MAR for AusNet Services, we have set the MAR for the first regulatory year at $562.3 million ($nominal), which is $11.1 million lower than the annual building block revenue requirement. We then apply an expected inflation rate of 2.00 per cent per annum and an X factor of 1.50 per cent per annum to determine the expected MAR in subsequent years.[24] We consider that our profile of X factors results in an expected MAR in the last year of the regulatory control period that is as close as reasonably possible to the annual building block revenue requirement for that year.[25]

Our draft decision results in an average increase of 0.54 per cent per annum ($nominal) in the expected MAR over the 2022–27 regulatory control period.[26] This consists of an initial increase of 0.83 per cent from 2021–22 to 2022–23, followed by average annual increases of 0.47 per cent during the remainder of the 2022–27

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[24]   NER, cl. 6A.5.3(c)(3).

[25]   NER, cl. 6A.6.8(c)(2). We consider a divergence of up to 3 per cent between the expected MAR and annual building block revenue requirement for the last year of the regulatory control period is appropriate, if this can achieve smoother price changes for users over the regulatory control period. In the present circumstances, based on the X factors we have determined for AusNet Services, this divergence is around 1.0 per cent.

[26]   In real 2021–22 dollar terms, our approved expected MAR for AusNet Services results in an average decrease of 1.43 per cent per annum over the 2022–27 regulatory control period.

regulatory control period.[27] Our draft decision also results in a decrease of 2.9 per cent in real terms ($2021–22) to AusNet Services' average annual allowed revenue relative to that in the 2017–22 regulatory control period. This is primarily because we have determined a lower return on capital amounts in this draft decision for the 2022–27 regulatory control period than that approved in the 2017–22 determination.

Figure 1.3 compares our draft decision building blocks for AusNet Services' 2022–27 regulatory control period with AusNet Services' proposed revenue requirement for the same period, and the approved revenue for the 2017–22 regulatory control period.

Figure 1.3 Total revenue by building block components ($million, 2021–22)
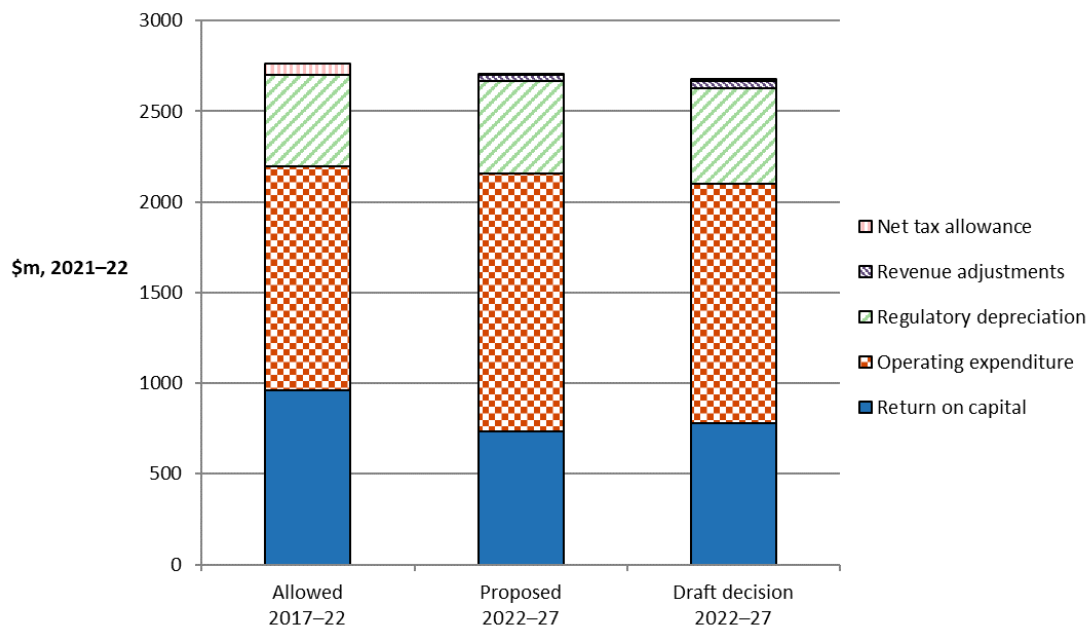
Source: AER analysis.

1.4.2   Shared assets

Service providers, such as AusNet Services, may use assets to provide both prescribed transmission services we regulate and unregulated services, for example by the stringing of telecommunications cables on the electricity network poles for the provision of telecommunication services. These assets are called 'shared assets'.[28] If the revenue from shared assets is material,[29] ten per cent of the unregulated revenues

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[27]   In real 2021–22 dollar terms, this consists an initial decrease of 1.14 per cent from 2021–22 to 2022–23, followed by annual decrease of 1.5 per cent during the remainder of the 2022–27 regulatory control period.

[28]   NER, cl. 6A.5.5.

[29]   The shared asset principles establish that use of share assets should be material before cost reductions are applied. The NER does not define materiality in this context. Our approach to what constitutes a material use of shared assets is that unregulated use of shared assets in a specific regulatory year is material when a service provider's annual average unregulated revenue from shared assets is expected to be greater than one per cent of its MAR for that regulatory year.

that a service provider earns from shared assets will be used to reduce the service provider's revenue for prescribed transmission services.[30]

AusNet Services forecast that it will receive $109 million ($2021–22) in shared asset revenue over the 2022–27 regulatory control period. These additional revenues are material at over one per cent of total revenues AusNet Services receives.[31] Accordingly, 10 per cent of these additional revenues will be shared with customers through a revenue adjustment in the PTRM. The 10 per cent recognises that customers should share in the unregulated revenues of assets they have funded, while also recognising that the businesses need incentives to provide these additional services and could incur additional costs in the provision of these services that customers do not pay.[32]

In some cases, to provide the dual service, the shared assets could require upgrade or enhancement. For example, a pole may not be strong enough to support both an electricity and telecommunications cable and would need to be enhanced to do so. If this enhancement is paid for by the third party and it benefits electricity customers in some way (for example, customers don't have to pay for replacement of the asset as soon as otherwise), then the AER can consider a proposed offset against the shared asset revenues in determining the revenue adjustment for customers.

AusNet Services has included an offset in its proposal, but we do not accept this offset in the present circumstances. The assets used to calculate the benefits are not shared assets and therefore cannot be used to determine an offset under the AER's *Shared asset guideline* (guideline).[33] The basis for this position is discussed further below.

Having reached this view it is not necessary for us to form a view on the calculation of the offset itself. However, the guideline provides limited information on the offset and this is the first time an offset calculation has been provided to us. Therefore, below we have provided our views on the offset calculation including the timing and application of the offset amounts as proposed by AusNet Services.

For this draft decision, we have determined a shared asset revenue adjustment as shown in Table 1.5. The removal of the offset will see $10.8 million ($2021–22) shared with customers across the 2022–27 regulatory control period.

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[30]   AER, *Shared asset guideline*, November 2013, p. 15.

[31]   AER, *Shared asset guideline*, November 2013, p. 8.

[32]   AER, *Explanatory Statement: Shared asset guideline*, November 2013, p. 25.

[33]   AER, *Shared asset guideline*, November 2013.

Table 1.5   AER's draft decision on AusNet Services' shared asset revenue adjustment ($million, 2021–22)

	2022–23	2023–24	2024–25	2025–26	2026–27	Total
AusNet Services	−1.7	−1.8	−2.0	−2.3	−2.5	−10.3
AER	**−1.8**	**−1.9**	**−2.1**	**−2.4**	**−2.6**	**−10.8**

Source: AusNet Services, *Revenue Proposal 2023–27, Post Tax Revenue Model - Revised*, 18 February 2021; AER analysis.

Scope of the contributions

AusNet Services appears to have interpreted the guideline as allowing offsets for any third party contributions that benefit customers. It noted section 3.4 of the guideline.

Clause 6A.5.5 of the NER explains that shared assets are those used to provide prescribed transmission services and one or both of i) non-regulated transmission services, or ii) services that are not transmission services. For a guideline intended to assess the contributions of shared assets, it would be inconsistent for non-shared assets to also enter the calculations. It could lead to, for example, the non-shared asset component more than offsetting the shared asset adjustment.

In the present circumstances, the proposed offsets relate to a realignment project paid for by the Victorian Government. The project involved the decommissioning of several existing transmission towers near Brooklyn Terminal Station and the construction and installation of six new transmission monopoles, and approximately 3km of conductor along the Westgate Freeway in Melbourne. This project was required to enable the widening of the Westgate Freeway as part of the Victorian Government's Westgate Tunnel.

The project was not undertaken for any shared asset purpose. These are network specific assets that provide a general benefit to customers but serve no dual (shared asset) function. These assets, therefore, are not shared assets for the purposes of clause 6A.5.5 of the NER and are not subject to the operation of the guideline. AusNet Services confirmed the same in its response to our questions advising that it does not consider the assets to be shared assets.[34]

In reviewing AusNet Services' proposal, some issues emerged that we can provide further guidance below.

Timing of the benefit

AusNet Services is claiming the offset for the 2022–27 regulatory control period. However, according to AusNet Services, had the realignment project not occurred, then customers would not have incurred replacement costs until at least 2027. AusNet

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34   AusNet Services, Email, *RE: AusNet Tx - AER information request #005 - RFM and PTRM inputs and shared assets - follow up to Q3*, 3 February 2021.

Services stated that the existing tower and conductor assets were installed in 1967 and, therefore, were expected to be replaced in approximately 2027.[35] Accordingly, even setting aside the scope issue above, this offset could not be accepted at this time.[36]

Given the benefits seemingly accrue to customers over the years 2027–2080, it would also be appropriate that the offsets be spread over this timeframe too, rather than being offset in a single 5 year regulatory control period.

How the offset is calculated and applied

The guideline does not specify how the calculation of an offset should be made. AusNet Services proposed a total offset of $0.5 million in its initial proposal. In response to our questions on this matter, AusNet Services proposed significant changes in both the value of the contributed assets in question and the way the benefits are calculated compared to the initial proposal. AusNet Services subsequently calculated the benefits to customers at $6.2 million, almost half of the $12.6 million of the value of the gifted assets in today's dollars. On the face of it, this seems high and, as noted above, would not be achieved in a single regulatory control period.[37]

AusNet Services noted it proposed to only claim 50 per cent of its calculated benefits, while noting that it did not need to do so under the guideline. However, we consider the sharing should be made consistent with the other calculations in the scheme. The simplest way to do this is to offset the proposed $6.2 million of benefits directly against the $109 million in third party revenues. That is, making the offset before, not after, the 10 per cent sharing is applied to those revenues. Alternatively a 10 per cent sharing factor could be applied directly to the offset, consistent with the 10 per cent of shared revenues that customers receive. The same proportional outcome is achieved by either approach.[38]

Summary

Customers benefit from the use of shared assets by non-electricity consumers. There can be cases where non-electricity consumers of the network make a significant contribution to the maintenance or enhancement of the shared assets that benefits electricity customers. This may give scope for an offset in determining the shared asset revenue adjustment. However, the offset was not intended to cover non-shared assets. The guideline did not detail how benefits to customers should be calculated. However, such benefits should be material for a given regulatory control period which is less likely if the benefits are only realised across decades. Such benefits should also be

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[35] The works began in 2017 but the assets are due to be gifted by the Victorian Government to AusNet Services this year.

[36] Any future assessment would also need to recognise that in 2027 customers will be using assets that are already partially depreciated. Rather than deferring replacement by 10 years as AusNet Services stated in its initial proposal, the realignment has brought forward replacement by at least 7 years.

[37] The calculations also relied on projections of WACC and inflation for 120 years into the future.

[38] The revenue adjustment should be calculated as either: (109-6.2) × 10% or (109 ×10% - 6.2 × 10%), which both give a figure of 10.3. AusNet Services proposed 109 ×10% - 6.2 × 50% = 7.8.

offset against the shared asset revenues before any sharing is applied to provide a consistent and proportional adjustment.

1.4.3 Indicative average transmission charges

AusNet Services is the main transmission network service provider for Victoria. Therefore, our draft decision on AusNet Services' expected MAR will ultimately affect the annual electricity bills paid by customers in Victoria. There are several steps required to translate our revenue decision into indicative transmission charges, and then to estimate bill impact.

Since we regulate AusNet Services' prescribed transmission services under a revenue cap, changes in the consumption of electricity will affect the transmission charges ultimately paid by customers. We estimate the indicative effect of our draft decision on forecast average transmission charges in Victoria by:

- taking AusNet Services' annual expected MAR determined in this draft decision, and

- dividing it by the forecast annual energy delivered in Victoria as published by AEMO.[39]

We note that AusNet Services used annual energy delivered data for Victoria published in the Australian Energy Market Operator's (AEMO's) 2019 *Electricity Statement of Opportunities* (2019 ESOO energy forecast) to calculate the indicative transmission charges in its revenue proposal.[40] The 2019 energy forecasts were prepared by AEMO before the outbreak of COVID-19 and therefore did not factor in the impacts of the pandemic on the projected energy demand. AEMO has incorporated the projected impacts of COVID-19 in its 2020 ESOO energy forecast. However, AEMO stated that as a result of COVID-19 and other factors, the uncertainty range of its 2020 energy forecast has increased compared to previous years.[41]

AusNet Services expressed concerns on the use of AEMO's 2020 energy forecast, which is significantly lower compared to the 2019 forecast, to calculate average transmission charges and customer bill impacts. Instead, it submitted that AEMO's 2019 energy forecast should be used.[42] We note that the macroeconomic assumptions used in AEMO's 2020 energy forecast are lower compared to the assumptions contained in the latest 2020–21 Victoria budget update.[43] Given this and the

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[39] AEMO, *National Electricity and Gas forecasting - 2019 Electricity Statement of Opportunities, Electricity and consumption forecast for Victoria (operations out)*; AEMO, *National Electricity and Gas forecasting - 2020 Electricity Statement of Opportunities, Electricity and consumption forecast for Victoria (operations out)*.
See http://forecasting.aemo.com.au/Electricity/AnnualConsumption/Operational, accessed on 19 May 2021.

[40] AusNet Services, *Revenue Proposal 2023–27, Post Tax Revenue Model - Revised*, 18 February 2021.

[41] AEMO, *National Electricity and Gas forecasting - 2020 Electricity Statement of Opportunities*, p. 3, August 2020.

[42] AusNet Services, *email response to AER Information request #005*, 18 January 2021.

[43] Victorian state government, *2020- 21 Budget Update, Macroeconomic data 2020–21 budget*, November 2020.
https://www.dtf.vic.gov.au/sites/default/files/document/Macroeconomic%20data_2020-21%20Budget%20-%20FINAL.xlsx
AEMO, *National Electricity and Gas forecasting - 2020 Electricity Statement of Opportunities, 2020 input assumptions workbook,* August 2020.

uncertainty noted by AEMO in relation to the 2020 energy forecast, we consider it is appropriate to use the average of AEMO's 2019 and 2020 energy forecasts to calculate the average transmission charges and customer bill impacts for the purposes of this draft decision. We will review this approach in the final decision, taking into account the updated demand forecast in AEMO's 2021 ESOO expected to be published later this year.[44]

Based on our approach, we estimate that this draft decision will result in an increase in annual average transmission charges from 2021–22 to 2026–27.[45]

Figure 1.4 shows the indicative average transmission charges over the period 2017–22 to 2022–27 in real 2021–22 dollar terms based on the expected revenues established in our draft decision compared to AusNet Services' proposed revenue requirement. The average transmission charges are expected to decrease from around $13.97 per MWh in 2021–22 to $13.73 per MWh in 2026–27.

Figure 1.4 Indicative transmission price path for Victoria ($/MWh, $2021–22)
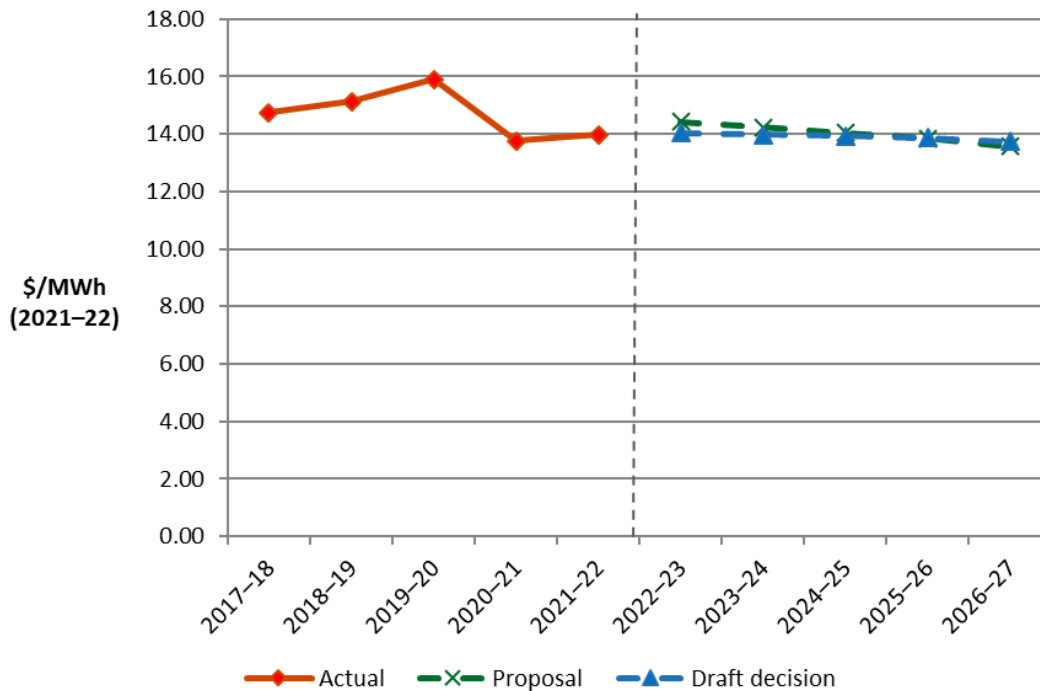
Source: AER analysis.

Notes: The price path for the transmission network is based on actual and forecast energy throughput amounts for AusNet Services' transmission network across Victoria.

See https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/inputs-assumptions-methodologies/2020/2020-inputs-and-assumptions-workbook-dec20.xlsx?la=en

[44]   It should be noted that we consider the use of average energy forecast is only appropriate for the purpose of calculating and presenting average transmission charges and bill impacts, and is not used to inform our assessment for other parts of this draft decision.

[45]   On average, the draft decision transmission revenues will increase by 0.5 per cent ($nominal) per annum from 2021–22 to 2026–27. The forecast energy delivered in Victoria will decrease by an average of 1.1 per cent per annum across that period. As a result, the indicative transmission charge will increase by 1.6 per cent ($nominal) per annum from 2021–22 to 2026–27.

1.4.4 Expected impact of combined decisions on electricity bills

The annual electricity bill for customers in Victoria reflects the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This draft decision primarily relates to the transmission charges for AusNet Services' prescribed transmission services, which represent approximately 5.5 per cent and 5.3 per cent on average for residential customers' and small business customers' annual electricity bill in Victoria respectively.[46]

We estimate the expected bill impact by varying AusNet Services' transmission charges in accordance with our draft decision, while holding all other components constant. This approach isolates the effect of our draft decision on the core transmission charges for AusNet Services only. However, this does not imply that other components will remain unchanged across the regulatory control period.[47]

Based on this approach in our draft decision, we expect that the transmission component of the average annual residential electricity bill in 2026–27 will increase by about $6 ($nominal) or 0.5 per cent from the 2021–22 total bill level. This outcome is substantially the same as the proposal.

Similarly, for an average small business customer in Victoria, we expect the transmission component of the average annual small business electricity bill in 2026–27 to increase by about $24 ($nominal) or 0.4 per cent from the 2021–22 total bill level. This outcome is substantially the same as the proposal.

Our estimated impact is based on an average annual electricity usage of around 4000 kWh per annum for residential households and 20,000 kWh per annum for small businesses.[48] Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors, such as metering, wholesale and retail costs, which affect electricity bills.

Table 1.6 shows our estimated impact of our draft decision and AusNet Services' proposal on the average annual electricity bills for residential and small business customers in Victoria over the 2022–27 regulatory control period.

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[46]   AusNet Services, *Regulatory Proposal 2023–27, Reset RIN Workbook 7,* 29 October 2020.

[47]   It also assumes that actual energy consumption will equal the forecast adopted in our draft decision. Since AusNet Services operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2022–27 regulatory control period.

[48]   Essential Services Commission of Victoria, *Victorian Default Offer 2021*, *Final decision*, 25 November 2020, p. 47.

Table 1.6 Estimated impact of AusNet Services' revenue proposal and the AER's draft decision on average annual electricity bills for the 2022–27 regulatory control period ($nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27
AER draft decision						
Residential annual electricity bill	1358	1360	1361	1362	1363	1364
Annual change		2 (0.1%)	1 (0.1%)	1 (0.1%)	1 (0.1%)	1 (0.1%)
Small business annual electricity bill	5488	5495	5500	5504	5509	5512
Annual change		7 (0.1%)	5 (0.1%)	5 (0.1%)	5 (0.1%)	3 (0.1%)
AusNet Services proposal						
Residential annual electricity bill	1358	1362	1363	1363	1364	1364
Annual change		4 (0.3%)	1 (0%)	1 (0%)	1 (0%)	0 (0%)
Small business annual electricity bill	5488	5504	5507	5509	5512	5513
Annual change		16 (0.3%)	3 (0%)	3 (0%)	2 (0%)	1 (0%)

Source: Essential Services Commission of Victoria, *Victorian Default Offer 2021*, *Final decision*, 25 November 2020, pp. 4–5, 47; AusNet Services, *Regulatory Proposal 2023–27, Reset RIN Workbook 7,* 29 October 2020; AEMO, *National Electricity and Gas forecasting - 2019 Electricity Statement of Opportunities, Electricity and consumption forecast for Victoria (operations out)*, August 2019; AEMO*, National Electricity and Gas forecasting - 2020 Electricity Statement of Opportunities, Electricity and consumption forecast for Victoria (operations out)*, August 2020. See http://forecasting.aemo.com.au/Electricity/AnnualConsumption/Operational, accessed on 19 May 2021.

Note: Energy consumption figures used in the bill calculation are based on the average of AEMO's 2019 and 2020 *Statement of Opportunities* demand forecasts.

Shortened forms

Shortened form	Extended form
ABS	Australian Bureau of Statistics
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AR	allowed revenue
capex	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
EBSS	efficiency benefit sharing scheme
MAR	maximum allowed revenue
NER	national electricity rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RIN	regulatory information notice
TNSP	transmission network service provider