# Final Decision

## Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, Power and Water Corporation and TasNetworks Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

## Attachment 14
## Control mechanisms

April 2024

AUSTRALIAN ENERGY REGULATOR

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# 14 Control mechanisms

Control mechanisms impose limits over the prices of direct control services (standard and alternative control services) and/or the revenues that distribution network service providers (distributors) can recover from customers for these services. For standard control services, the National Electricity Rules (NER)[1] require the control mechanism be of the prospective CPI–X form (or some incentive-based variant).

The forms of the control mechanisms that will apply to a distribution determination and the formulae that give effect to those control mechanisms are considered during the framework and approach (F&A) stage. There are limited circumstances where we may depart from the control mechanisms set out in the F&A paper.[2] For example, we can only depart from the formulae if we consider there has been a material change in circumstances.

This attachment discusses:

- the form and formulae of the control mechanisms for standard control services[3]
- the form and formulae of the control mechanisms for alternative control services[4]
- how compliance with the control mechanisms is to be demonstrated,[5] including the mechanism through which the distributors will recover distribution revenues and account for revenue under or over recovery
- how the distributors are to report on their recovery of designated pricing proposal charges and jurisdictional scheme amounts, including adjustments for under or over recovery of these amounts[6]
- other mechanisms that support the control mechanisms and compliance with regulatory settings.

We apply the mechanisms addressed in this attachment, including all related formulae and interpretations, through our standardised annual pricing models.

## 14.1 Final decision

Our final determination for each of the distributors[7] is as follows:

- The form of control mechanism for standard control services is a revenue cap. Section 14.4 provides our final decision which includes the revenue cap formulae (Figure 14-1),

1 For Power and Water Corporation, the NT NER applies, rather than the NER. For all references to the NER in this attachment, the NT NER mirrors the NER provisions.

2 NER, cll. 6.12.3(c) and (c1).

3 NER, cl. 6.12.1(11).

4 NER, cl. 6.12.1(12).

5 NER, cl. 6.12.1(13).

6 NER, cll. 6.12.1(19) and (20).

7 Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, Power and Water Corporation and TasNetworks

including for distributors that have reclassified metering services as a standard control service and distributors with prescribed (transmission) services

- The form of control mechanism for alternative control services is a price cap. Section 14.5 provides our final decision which includes:
  - the price cap formulae (Figure 14-5) for fee-based ancillary network services, metering services (where applicable) and public lighting services. The metering services true-up mechanism listed also apply to networks that have reclassified metering services as a standard control service.
  - the price cap formula (Figure 14-7) for quoted ancillary network services.
- The mechanism and formulae to demonstrate compliance with the side constraint are provided in Appendix A.
- The mechanisms to demonstrate compliance with the revenue cap are the unders/overs statement and account. These mechanisms are provided in Appendix B and the presentation has been revised to improve transparency and accessibility.
- The mechanisms to demonstrate compliance with reporting of designated pricing proposal charges and jurisdictional scheme amounts are the relevant unders/overs statements and accounts. These mechanisms are provided in Appendix B and have been revised to improve transparency and accessibility.
- The template for demonstrating compliance using these mechanisms is the standardised pricing model. This template is addressed in Appendix C.
- Other rules and notes relating to the demonstration of compliance within these mechanisms, including rounding, are provided in Appendix D.

## 14.2 The distributors' revised proposals

Ausgrid, Evoenergy, TasNetworks and Power and Water Corporation accepted our draft decision on control mechanisms in full.[8]

Endeavour Energy and Essential Energy accepted our draft decision but with updates to account for their reclassification of metering services to standard control services.[9] These updates reflected our guidance note for metering.[10] These changes are discussed in detail in subsequent sections.

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8 Ausgrid, *2024–29 Revised regulatory proposal*, November 2023, p. 60; Evoenergy, *2024–29 Revised regulatory proposal*, November 2023, p. 27; TasNetworks, *2024–29 Revised regulatory proposal*, November 2023, p. 6 and TasNetworks, *Regulatory proposal – Attachment 16 – Control mechanisms*, January 2023; Power and Water Corporation, *2024–29 Revised regulatory proposal*, November 2023, pp. xxvi-xxviii.

9 Endeavour Energy, *2024–29 Revised regulatory proposal*, November 2023, p. 7 and 32–33; Essential Energy, *2024–29 Revised regulatory proposal*, November 2023, p. 35 and 63–64.

10 AER, *Legacy metering services - guidance for revised proposals*, November 2023

## 14.3 Assessment approach

Our approach to assessing the form of control mechanisms is unchanged from our final F&A and draft decision. That is, having regard to the factors in clauses 6.2.5(c) and 6.2.5(d) of the NER.

The final F&A sets the form of control mechanism which binds our determination. However, some parameters of the formulae were left open so they can be better defined in our determination.[11] The draft determination clarified our position regarding these parameters.

We may only make changes to the formulae specified in the F&A where we are satisfied that there has been a material change in circumstances.

## 14.4 Final decision for standard control services

The following sets out our final decision on the control mechanism formulae for standard control services. It also sets out our decision in relation to:

- deliberately under-recovered revenue
- unpaid network charges from retailer of last resort events
- the reporting of designated pricing proposal charges
- the reporting of jurisdictional scheme amounts
- the rounding of inputs in annual pricing proposals.

Where our decision is unchanged from the draft decision, we do not repeat our reasoning in the final decision.[12]

### 14.4.1 Control mechanism formulae for standard control services

Our final decision on the revenue cap formulae gives effect to the control mechanism set out in the final F&A. Figure 14-1 sets out the revenue cap formulae for standard control services for Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, Power and Water Corporation and TasNetworks. Our final decision has updated the definition of the I-factor to correctly account for TasNetworks being subject to version 2.0 of the service target performance incentive scheme in the 2024–29 period.[13]

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11 See for example AER, *Final framework and approach for Ausgrid, Endeavour Energy and Essential Energy for the 2024-29 regulatory control period*, July 2022.

12 AER, *Draft Decision Attachment 14 - Control mechanisms - Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, Power and Water Corporation and TasNetworks 2024-29 Distribution revenue proposal*, September 2023.

13 AER, *Draft Decision Attachment 10 - Service target performance incentive scheme - TasNetworks - 2024-29 Distribution revenue proposal*, September 2023.

## Figure 14-1 Revenue cap formulae

| Formula | Equation | where |
|---|---|---|
| 1. | $\mathrm{TAR}_t \geq \sum_{i=1}^{n} \sum_{j=1}^{m} p_t^{ij} q_t^{ij}$ | $i = 1, \ldots, n$ $j = 1, \ldots, m$ $t = 1, 2, 3, 4, 5$ |
| 2. | $\mathrm{TAR}_t = \mathrm{AAR}_t + I_t + B_t + C_t$ | $t = 1, 2, 3, 4, 5$ |
| 3. | $\mathrm{AAR}_t = \mathrm{AR}_t$ | $t = 1$ |
| 4. | $\mathrm{AAR}_t = \mathrm{AAR}_{t-1} \times (1 + \Delta\mathrm{CPI}_t) \times (1 - X_t)$ | $t = 2, 3, 4, 5$ |
| 5. | $B_t = b_t + A_t$ | $t = 1, 2, 3, 4, 5$ |
| 6. | $b_t = -O_t \times (1 + \mathrm{WACC}_t)^{0.5}$ | $t = 1, 2, 3, 4, 5$ |
| 7. | $A_t = a_t^1 + a_{t-1}^2 \times (1 + \mathrm{WACC}_t) + a_{t-2}^3 \times (1 + \mathrm{WACC}_{t-1}) \times (1 + \mathrm{WACC}_t)$ | $t = 1, 2, 3, 4, 5$ |
| 8. | $\mathrm{WACC}_t = (1 + \mathrm{rvWACC}_t) \times (1 + \mathrm{CPI}_t) - 1$ | $t = 1, 2, 3, 4, 5$ |

where:

| Variable | Represents |
|---|---|
| $t$ | the relevant regulatory year, with t = 1 being the 2024–25 financial year. |
| $\mathrm{TAR}_t$ | the total annual revenue for year t, calculated as per formula 2 above. |
| $p_t^{ij}$ | the price of component 'j' of tariff 'i' for year t. |
| $q_t^{ij}$ | the forecast quantity of component 'j' of tariff 'i' for year t. |
| $\mathrm{AR}_t$ | the annual smoothed revenue requirement in the Post Tax Revenue Model (PTRM) for year t. |
| $\mathrm{AAR}_t$ | the adjusted annual smoothed revenue requirement for year t, calculated as per formulae 3 and 4 above. |
| $I_t$ | the sum of incentive scheme adjustments for year t. Where applicable, incorporates revenue adjustments relating to the outcomes of:<br>• the service target performance incentive scheme (STPIS) (S-factor) in relation to regulatory year t-2. Where networks have STPIS payments expressed as a percentage adjustment to adjusted annual smoothed revenue (as in STPIS 1.2), the percentage will be converted to an equivalent monetary value to be incorporated directly into the I-factor.<br>• the demand management incentive scheme (DMIS) in relation to regulatory year t-2<br>• the demand management innovation allowance mechanism (DMIAM) relating to the 2019–24 regulatory control period to be applied in regulatory year t = 2 only<br>• the customer service incentive scheme (CSIS) (H-factor) in relation to regulatory year t-2 |

| Variable | Represents |
|---|---|
| | • the export service incentive scheme (ESIS) (E-factor) in relation to the regulatory year t-2<br>• any other related incentive schemes as applicable that are to be applied in year t. |
| $B_t$ | the sum of annual adjustment factors for year t, calculated as per formula 5 above. It includes:<br>• the true-up of any under or over recovery of actual revenue (b-factor) collected through distribution use of system (DUoS) charges calculated using the method outlined in formula 6.<br>• any other bespoke adjustments the AER deems necessary (A-factor). These include but are not limited to: residuals of jurisdictional scheme amounts upon cessation, applicable licence fee payments, or other true-ups not provided for elsewhere. These adjustments will apply the time value of money where appropriate, calculated as per formula 7 above. |
| $C_t$ | the approved pass-through amounts (positive or negative) for year t, as determined by the AER. It will also include any annual or end of period adjustments for year t. |
| $\Delta CPI_t$ | the annual percentage change in the Australian Bureau of Statistics' (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities[14] from December in year t–2 to December in year t–1. For example, for 2024–25, t–2 is December 2022 and t–1 is December 2023. |
| $X_t$ | the X factor in year t, incorporating annual adjustments to the PTRM for the trailing cost of debt. |
| $b_t$ | the true-up for the balance of the DUoS unders and overs account in year t, calculated as per formula 6 above. |
| $O_t$ | the opening balance of the DUoS unders and overs account in year t as calculated by the method in Appendix B. |
| $WACC_t$ | the approved weighted average cost of capital (WACC) used in regulatory year t in the DUoS unders and overs account in Appendix B. The WACC is updated annually to apply actual inflation, calculated as per formula 8 above. It is also applied to true-up mechanisms to adjust for the time value of money. |
| $A_t$ | the sum of bespoke adjustments, including the application of the time value of money where appropriate, calculated as per formula 7 above. |
| $a_t^1$ | the bespoke adjustment '1' for year t. Formula 7 above demonstrates the application of the time value of money for different bespoke adjustments relating to different regulatory years. |
| $rvWACC_t$ | the real vanilla WACC provided in the annually updated PTRM for year t. |

Endeavour Energy and Essential Energy proposed that metering services be reclassified as a standard control service because the AEMC, in its final decision on the review of the regulatory framework for metering services, recommended the use of the revenue

[14] If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

determination process to manage the uncertainty of the rule change.[15] Endeavour Energy also proposed an alternate mechanism to recover metering service costs in its revised proposal. Instead of a separate revenue account for metering, it instead proposed a legacy metering adjustment factor (to be added to the non-metering standard control services revenue account) to reduce complexity in calculation and billing.[16]

We consider the AEMC's final decision to be a material change in circumstances that justifies a departure from the revenue cap formulae set out in the distributors' respective final F&As. Our final decision attachments for metering accepts this reclassification but does not accept Endeavour Energy's proposal for a legacy metering adjustment factor.[17]

The revenue cap formulae that will apply for Endeavour Energy and Essential Energy for standard control services is the same as above in Figure 14-1. These formulae will each apply to the main SCS component and the metering SCS component in parallel. This will provide greater transparency to stakeholders on the proportion of distribution costs attributed to metering services, relevant adjustments, and revenue true-ups.

Figure 14-2 below provides alternate definitions for application to metering where relevant.

**Figure 14-2 Revenue cap formulae definitions where metering services are a standard control service**

| Variable | Represents |
|---|---|
| $AR_t$ | the annual smoothed revenue requirement in the Metering PTRM for year t. |
| $I_t$ | equals 0 for metering as there are no applicable incentive schemes. |
| $B_t$ | the sum of annual adjustment factors for year t, calculated as per formula 5 above. It includes:<br>• the true-up of any under or over recovery of actual revenue (b-factor) collected through metering charges calculated using the method outlined in formula 6.<br>• the true-up of metering operating expenditure (opex) for variations in metering volumes as a result of legacy metering retirement plans (see section 14.5.1 and Figure 14-6 below).<br>• any other bespoke adjustments the AER deems necessary (A-factor). These include other true-ups not provided for elsewhere. These adjustments will apply the time value of money where appropriate, calculated as per formula 7 above. |
| $C_t$ | the approved metering pass-through amounts (positive or negative) for year t, as determined by the AER. It will also include any annual or end of period adjustments for year t. |
| $X_t$ | the X factor in year t, incorporating annual adjustments to the metering PTRM for the trailing cost of debt. |

15 AEMC, *Review of the regulatory framework for metering services – final report*, 30 August 2023, pp. 44–45.

16 Endeavour Energy, *0.01 Revised Regulatory Proposal*, November 2023, pp. 32–33.

17 AER, *Final Decision Attachment 20 - Metering services - Endeavour Energy - 2024-29 Distribution revenue proposal*, April 2024; AER, *Final Decision Attachment 20 - Metering services - Essential Energy - 2024-29 Distribution revenue proposal*, April 2024.

| Variable | Represents |
|---|---|
| $b_t$ | the true-up for the balance of the metering unders and overs account in year t, calculated as per formula 6 above. |
| $O_t$ | the opening balance of the metering unders and overs account in year t as calculated by the method in Appendix B. |
| $WACC_t$ | the approved weighted average cost of capital (WACC) used in regulatory year t in the metering unders and overs account in Appendix B. The WACC is updated annually to apply actual inflation, calculated as per formula 8 above. It also applied to true-up mechanisms to adjust for the time value of money. |
| $rvWACC_t$ | the real vanilla WACC provided in the annually updated metering PTRM for year t. |

#### 14.4.1.1 TasNetworks

Our final decision includes two annual adjustments that are applied through the A factor in TasNetworks' revenue cap: the true-up for its Electrical Safety Inspection Service charge (ESISC) and the true-up for its National Electricity Market charge (NEMC). These are existing annual adjustments to TasNetworks' allowed revenue which represents the charges it is obliged to pay to operate in Tasmania.[18] For each of these adjustments, our final decision sets a forecast amount for these payments and then they are annually adjusted to true-up the difference between forecast and actual costs.

Figure 14-3 provides the calculation for the true-ups for the ESISC and NEMC for TasNetworks. These amounts will have WACC applied to adjust for the time value of money in determining year t-1 amounts in year t dollar terms. The time value of money adjustment will be calculated as per formula 7 of the revenue cap formula in Figure 14-1.

**Figure 14-3 TasNetworks ESISC and NEMC true-up formulae**

| Formula | Equation | where |
|---|---|---|
| 1. | $a^1_{t-1} = ESISC_{t-1} = (ESISCa_{t-1} - ESISCe_{t-1})$ | $t = 1, 2, 3, 4, 5$ |
| 2. | $a^2_{t-1} = NEMC_{t-1} = (NEMCa_{t-1} - NEMCe_{t-1})$ | $t = 1, 2, 3, 4, 5$ |

where:

| Variable | Represents |
|---|---|
| $ESISCa_{t-1}$ | the actual ESISC for year t-1. |
| $ESISCe_{t-1}$ | the estimated ESISC for year t-1 as per the amount to be set in the final distribution determination. |
| $NEMCa_{t-1}$ | the actual NEMC for year t-1. |
| $NEMCe_{t-1}$ | the estimated NEMC for year t-1 as per the amount to be set in the final distribution determination. |

[18] AER, *Draft Decision Attachment 06 - Operating expenditure - TasNetworks- 2024-29 Distribution revenue proposal*, September 2023, pp. 5–6, 28.

### 14.4.2 Prescribed (transmission) services

In its pricing proposals, Ausgrid and Evoenergy must demonstrate that revenues for their prescribed (transmission) services are consistent with the formulae in figure 14-4. These formulae are identical to the ones used in the 2019–24 period, without the remittal true-up variable because it is no longer necessary. Ausgrid and Evoenergy supported the inclusion of these formulae.[19] These formulae were inadvertently omitted from our draft decision and included here for completeness.

**Figure 14-4 Revenue cap formulae for prescribed (transmission) services**

| Formula | Equation | where |
|---|---|---|
| 1. | $MAR_t = AR_t \pm PT_t$ | $t = 1, 2, 3, 4, 5$ |
| 2. | $\mathrm{AR_t} = \mathrm{AR_{t-1}} \times (1 + \Delta\mathrm{CPI_t}) \times (1 - \mathrm{X_t})$ | $t = 1, 2, 3, 4, 5$ |

where:

| Variable | Represents |
|---|---|
| $t$ | the regulatory year with t = 1 being the 2024–25 financial year. |
| $\mathrm{MAR_t}$ | the maximum allowable average revenue for year t. |
| $\mathrm{AR_t}$ | the annual smoothed revenue expected revenue for year t. For the 2024–25 regulatory year, $\mathrm{AR_{t-1}}$ is the annual smoothed expected revenue for prescribed transmission services in the Post Tax Revenue Model for 2024–25. |
| $\mathrm{PT_t}$ | the annual adjustment factor that reflects the pass through amounts approved by the AER with respect to regulatory year t. |
| $\Delta\mathrm{CPI_t}$ | the annual percentage change in the Australian Bureau of Statistics' (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities[20] from December in year t–2 to December in year t–1. For example, for 2024–25, t–2 is December 2022 and t–1 is December 2023. |
| $\mathrm{X_t}$ | the X factor in year t, incorporating annual adjustments to the PTRM for the trailing cost of debt. |

### 14.4.3 Deliberately under-recovered revenue

We accept there are times when the distributors may decide to deliberately recover below their allowed revenue. This contrasts with unintentional under recovery due to a clerical error or a natural variation between forecast quantities of a service offered and actual quantities achieved. In the event of a deliberate under-recovery, this revenue will not be counted as an

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19 Ausgrid – AGD IR#55 – *Embedded networks, storage pricing, transmission – 20231206* and Evoenergy – EVO IR#59 – *Prescribed transmission services control mechanism – 20240319*.

20 If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

under recovery for the purpose of the unders and overs mechanism and by extension will therefore subsequently not be allowed to be recovered from customers in future years, i.e., increase the total allowable revenue in future years.

### 14.4.4 Unpaid network charges resulting from retailer of last resort events

During the current 2019–24 period, we have seen an increase in retailer of last resort (ROLR) events. These events generally involve the insolvency of a retailer, resulting in an unpaid balance of network charges that are not recovered from that retailer.

In such events, distributors can recover these amounts through a cost pass-through.[21] However, due to the substantial number of qualifying cost pass-through events in recent years, we introduced an adjustment in the unders and overs mechanism to account for these events, removing the administrative burden to both distributors and the AER of a cost pass-through application. We consider the recovery of these amounts to be minor in nature.

### 14.4.5 Side constraint mechanism

For standard control services, the NER provides for additional consumer protections through the operation of a side constraint on tariffs. In general terms, this mechanism operates to ensure any increases in revenues for a particular tariff class do not exceed increases provided under the control mechanism by more than 2%.

The formulae that give effect to this mechanism are provided in Appendix A.

### 14.4.6 Reporting on designated pricing proposal charges

We must decide how the distributors will report on the recovery of designated pricing proposal charges for each year of the 2024–29 period and how to account for any under or over recovery of revenue associated with those charges.

We apply a mechanism to facilitate this reporting and account for the true-up of under and over recovery of revenue. This approach is similar to the DUoS revenue unders and overs mechanism and is consistent with the requirements of the NER. It is also consistent with the approach applied to distributors in other jurisdictions. The operation of this method is detailed in Appendix B.

### 14.4.7 Reporting on jurisdictional scheme amounts

We must decide how the distributors will report on the recovery of jurisdictional scheme amounts for each year of the 2024–29 period and how to account for any under or over recovery of revenue associated with those charges.

We apply a mechanism to facilitate this reporting and account for the true-up of under and over recovery of revenue. This approach is similar to the DUoS revenue under and over recovery mechanism and is consistent with the requirements of the NER. It is also consistent

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21 Excluding Power and Water Corporation. The retailer insolvency event has no effect until after the National Energy Retail Law and the associated retailer of last resort provisions are applied as a law by the Northern Territory: see National Electricity (Northern Territory)(National Uniform Law)(Modification) Regulations, reg. 5A.

with the approach applied to distributors in other jurisdictions. The operation of this method is detailed in Appendix B.

### 14.4.8 Rounding of inputs in annual pricing proposal process

When reporting on compliance as part of the annual pricing proposal process each year of the 2024–29 period, we require that certain calculation inputs be used on an unrounded basis while others may be used on a rounded basis. The process for rounding and the specific inputs to be rounded are detailed in Appendix D.

## 14.5 Final decision for alternative control services

The following sets out our final decision on the control mechanism formulae for alternative control services.

### 14.5.1 Control mechanism formulae for alternative control services

Figure 14-5 and Figure 14-7 sets out the price cap formulae to apply for alternative control services (where applicable) in the 2024–29 period. Our decision is mostly unchanged from the draft decision, with the exception of Formula 2 in Figure 14-5 which has been revised to not apply when year t = 1 (our final decision price caps apply instead).

As noted in our draft decision, we introduced a metering services true-up mechanism in Figure 14-6. While this mechanism is in the alternative control services section of this attachment, we apply this mechanism to the networks that have reclassified metering as a standard control service also (with the omission of formulae 1, which applies the adjustment in the form of a weighted average price cap mechanism). This mechanism does not apply to Power and Water Corporation.[22]

**Figure 14-5 Price cap formulae (fee-based ancillary network services, metering services, and public lighting)**

| Formula | Equation | where |
|---|---|---|
| 1. | $\bar{p}_t^i \geq p_t^i$ | $i = 1, \dots, n$<br>$t = 1, 2, 3, 4, 5$ |
| 2. | $\bar{p}_t^i = \bar{p}_{t-1}^i \times (1 + \Delta CPI_t) \times (1 - X_t^i) \times (1 + A_t^i)$ | $i = 1, \dots, n$<br>$t = 2, 3, 4, 5$ |

where:

| Variable | Represents |
|---|---|
| $t$ | the regulatory year with t = 1 being the 2024–25 financial year. |
| $\bar{p}_t^i$ | the cap on the price of service 'i' for year t. |

[22] AER, *Draft Decision Attachment 14 - Control mechanisms - Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, Power and Water Corporation and TasNetworks 2024-29 Distribution revenue proposal*, September 2023, pp. 14–15.

| Variable | Represents |
|---|---|
| $p_t^i$ | the price of service 'i' in year t. The initial value is to be decided in the distribution determination. |
| $\bar{p}_{t-1}^i$ | the cap on the price of service 'i' for year t-1. |
| $\Delta CPI_t$ | the annual percentage change in the Australian Bureau of Statistics' (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities[23] from December in year t–2 to December in year t–1. For example, for 2024–25, t–2 is December 2022 and t–1 is December 2023. |
| $X_t^i$ | the X-factor for service i in year t. The value of this factor is as specified in Attachment 16 – Alternative control services. |
| $A_t^i$ | the sum of any adjustments for service 'i' in year t. This includes any bespoke adjustments the AER deems necessary, applying the time value of money where appropriate. It also includes the true-up mechanism for metering services, calculated as per Figure 14-6 below. |

## Figure 14-6 Metering true-up mechanism

| Formula | Equation | where |
|---|---|---|
| 1. | $A_t^{metering} = \frac{(1 + a_t^{metering})}{(1 + a_{t-1}^{metering})} - 1$ | $t = 2, 3, 4, 5$ |
| 2. | $a_t^{metering} = \frac{(b_{t-1}^{metering} + b_{t-2}^{metering})}{(AR_t^{metering})}$ | $t = 2, 3, 4, 5$ |
| 3. | $b_{t-1}^{metering} = (O_{t-1}^{estimate} - O_{t-1}^{forecast}) \times (1 + WACC_t)$ | $t = 2, 3, 4, 5$ |
| 4. | $b_{t-2}^{metering} = (O_{t-2}^{actual} - O_{t-2}^{estimate}) \times (1 + WACC_{t-1}) \times (1 + WACC_t)$ | $t = 2, 3, 4, 5$ |
| 5. | $WACC_t = (1 + rvWACC_t) \times (1 + CPI_t) - 1$ | $t = 2, 3, 4, 5$ |

where:

| Variable | Represents |
|---|---|
| $A_t^{metering}$ | the adjustment to metering services price caps to apply the true-up mechanism for metering operating expenditure, calculated as per formula 1 above. This formula applies only to ACS. |
| $a_t^{metering}$ | the calculated adjustment to true-up metering operating expenditure for year t, calculated as per formula 2 above. |
| $a_{t-1}^{metering}$ | the calculated adjustment to true-up metering operating expenditure for year t-1, as applied in the previous year's annual pricing proposal. For ACS, this is discounted from $a_t^{metering}$ in formula 1 to provide the applicable adjustment. In year 2 (2025–26) the value is zero. |

[23] If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

| Variable | Represents |
|---|---|
| $b_{t-1}^{metering}$ | the balancing adjustment for year t-1, calculated as per formula 3 above. This reflects the true-up of estimated opex against forecast opex. |
| $b_{t-2}^{metering}$ | the balancing adjustment for year t-2, calculated as per formula 4 above. This reflects the true-up of actual opex against the previously estimated opex. In year 2 (2025–26) the value is zero. |
| $O_{t-1}^{forecast}$ | the forecast opex as included in the metering PTRM for year t-1. |
| $O_{t-1}^{estimate}$ | the estimated opex for year t-1, provided by the distributor in its annual pricing proposal. |
| $O_{t-2}^{estimate}$ | the estimated opex for year t-2, as previously provided by the distributor in its previous annual pricing proposal. |
| $O_{t-2}^{actual}$ | the actual opex for year t-2, as reported in the regulatory information notices (or similar). |
| $WACC_t$ | The approved weighted average cost of capital (WACC) used in regulatory year t in the DUoS unders and overs account in Appendix B. The WACC reflects actual inflation, calculated as per formula 5 above. For the avoidance of doubt, this WACC will be the annually updated WACC used for SCS. |

## Figure 14-7 Price cap formulae (quoted services)

| Formula | Equation | Where |
|---|---|---|
| 1. | $\bar{p}_t = Labour_t + Contractor\ Services_t + Materials_t + Margin_t + Tax_t$ | $t = 1, 2, 3, 4, 5$ |
| 2. | $Labour_t = Labour_{t-1}(1 + \Delta CPI_t) \times (1 - X_t^i)$ | $t = 2, 3, 4, 5$ |
| 3. | $Margin_t = 6\% \times (Labour_t + Contractor\ Services_t + Materials_t)$ | $t = 1, 2, 3, 4, 5$ |

where:

| Variable | Represents |
|---|---|
| $t$ | the regulatory year with t = 1 being the 2024–25 year. |
| $\bar{p}_t$ | the applicable price cap for the requested service. |
| $Labour$ | the labour costs directly incurred in the provision of the service which may include labour on-costs, fleet on-costs and overheads. Labour is escalated annually by CPI-X, calculated as per formula 2 above. |
| $\Delta CPI_t$ | the annual percentage change in the Australian Bureau of Statistics' (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities[24] from December in year t–2 to December in year t–1. For example, for 2024–25, t–2 is December 2022 and t–1 is December 2023. |
| $X_t^i$ | the X factor for labour rate 'i' in year t. The value of this factor is as specified in Attachment 16 – Alternative control services. |

[24] If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

| Variable | Represents |
|---|---|
| Contractor Services | the costs associated with the use of external labour including overheads and any direct costs incurred. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred are passed on to the customer. |
| Materials | the cost of materials directly incurred in the provision of the service, material storage and logistic on-costs and overheads. |
| Margin | 6% multiplied by the sum of labour, contractor services, and materials, calculated as per formula 3 above. |
| Tax | the tax payable at the company tax rate of 30% on the capital component of the expenditure (revenue less expenses) that incurs a tax liability. |

### 14.5.2 Addition of new alternative control services

Distributors should propose changes to their alternative control services as a part of their regulatory proposals. However, we understand there are times where a distributor cannot foresee a specific new service at the time of the regulatory determination. This is especially relevant in public lighting where new technologies are emerging, including more advanced light-emitting diode (LED) lamps and the integration of smart devices in public lighting infrastructure.

During the 2024–29 period, we will allow distributors to propose new services. New services should only be introduced because customers want them (customer driven). Our assessment of new services will include consideration of the extent customers have transparency over the costs of the service as well as the likely benefits to customers from the service.

Where new services are to be introduced that clearly fall within one of the established service groupings, such as public lighting, a quoted price approach is to be adopted with the price to be based on a relevant service within that same service grouping. For example, the price for a new type of public lighting would be based on a relevant public lighting service.

Prices for new services will be formalised as a part of the annual pricing process. However, we encourage distributors to engage with us as early as possible on any proposed new service.

Prior to submitting their annual pricing proposal, the distributors must submit to the AER:

- a detailed description of the service along with how the new service will be charged,
- the proposed quoted price setting out each cost component consistent with Figure 14-7 above, and
- demonstration of customer engagement and support.

The AER will consider the proposal for inclusion in the relevant annual pricing proposal. This is consistent with our F&A, and regulatory determinations across all NEM jurisdictions.

### 14.5.3 Transparency of quoted services

Our final decision includes requirements around transparency of billing for quoted services. When charging for quoted services:

- Distributors must provide itemised invoices to the customer or the service recipient. The itemised invoices must show all cost components. At a minimum, invoices must contain information on the cost components to demonstrate compliance with the control mechanism formula for quoted services (see Figure 14-7).
- The charges must be consistent with good industry practice in terms of the resource requirements.

# A Side constraint mechanism

Figure 14-8 sets out the side constraint formulae to apply for the 2024–29 period. It is unchanged from the draft decision. These formulae apply when year t = 2, 3, 4 and 5.

Similar to the revenue cap formulae, for Endeavour Energy and Essential Energy these formulae will each apply to the main SCS component and the metering SCS component in parallel.

### Figure 14-8 Side constraint formulae

| Formula | Equation |
|---|---|
| 1. | $$PP_t \geq \frac{SCR_t}{SCR_{t-1}}$$ |
| 2. | $$PP_t = \left((1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) - 1\right) \times D_t + AA_t + Q_t + 1$$ |
| 3. | $$SCR_t = \sum_{i=1}^{m} \sum_{j=1}^{n} p_t^{ij} q_t^{ij}$$ |
| 4. | $$SCR_{t-1} = \sum_{i=1}^{m} \sum_{j=1}^{n} p_{t-1}^{ij} q_t^{ij}$$ |
| 5. | $$D_t = \frac{AAR_{t-1}}{SCR_{t-1}}$$ |
| 6. | $$AA_t = \frac{(I_t + C_t + B_t) - (I_{t-1} + C_{t-1} + B_{t-1})}{SCR_{t-1}}$$ |
| 7. | $$Q_t = \left(\frac{TAR_{t-1}}{SCR_{t-1}} - 1\right)$$ |

where each tariff class has “n” tariffs, with each up to “m” components, and where:

| Variable | Represents |
|---|---|
| $PP_t$ | the permissible percentage for year t, calculated as per formula 2 above. |
| $SCR_t$ | the side constraint revenue for year t, calculated as the sum of the products of proposed prices and forecast quantities for year t, calculated as per formula 3 above. |
| $SCR_{t-1}$ | the side constraint revenue for year t-1, calculated as the sum of the products of prices charged for year t-1 and forecast quantities for year t, calculated as per formula 4 above. |
| $\Delta CPI_t$ | the annual percentage change in the Australian Bureau of Statistics’ (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities[25] from December in year t–2 to December in year t–1. For example, for 2024–25, t–2 is December 2022 and t–1 is December 2023. This is as per the change in CPI used in the revenue cap formulae in Figure 14-1 above. |
| $X_t$ | the X-factor for each year of the regulatory control period as determined in the post-tax revenue model, and annually revised for the return of debt update. This is as per the X-factor used in the |

[25] If the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

| Variable | Represents |
|---|---|
| | revenue cap formulae. If X>0, then X will be set equal to zero for the purposes of the side constraint formula. |
| $2\%$ | the additional 2% threshold defined in the NER.[26] |
| $\mathrm{D_t}$ | the adjustment to create a common revenue base, calculated as per formula 5 above. |
| $\mathrm{AA_t}$ | the annual percentage change in the sum of all annual adjustment factors (I, B and C factors). This is calculated by dividing the total incremental revenues (the difference between the factors used in the total annual revenue formula for regulatory year t and year t-1) by the expected revenues for year t-1 ($SCR_{t-1}$). This calculation is provided at formula 6 above. |
| $\mathrm{Q_t}$ | the adjustment made each year to account for changes in quantities from the preceding year. The Q factor calculation is provided at formula 7 above. |
| $\mathrm{p_t^{ij}}$ | the proposed price for component 'j' of tariff 'i' for year t. |
| $\mathrm{q_t^{ij}}$ | the forecast quantity for component 'j' of tariff 'i' for year t. |
| $\mathrm{p_{t-1}^{ij}}$ | the price charged for component 'j' of tariff 'i' for year t-1. |
| $\mathrm{AAR_{t-1}}$ | the adjusted annual revenue requirement for year t-1, as used in the revenue cap formulae in Figure 14-1 above in the preceding and current years. |
| $\mathrm{I_t}$ | the sum of incentive scheme adjustments in year t, as per the revenue cap formulae in Figure 14-1 above. |
| $\mathrm{C_t}$ | the sum of approved cost pass through amounts (positive or negative) in year t, as determined by the AER. It will also include any end-of-period adjustments to be made in year t, as per the revenue cap formulae in Figure 14-1 above. |
| $\mathrm{B_t}$ | the sum of annual adjustment factors for year t, as per the revenue cap formulae in Figure 14-1 above. It includes adjustments to balance the unders/overs account, relating to previous under/over-recoveries of revenue. |
| $\mathrm{I_{t-1}}$ | the sum of incentive scheme adjustments in year t-1. This is as per the approved t-1 pricing proposal. |
| $\mathrm{C_{t-1}}$ | the sum of approved cost pass through amounts (positive or negative) in year t-1, as determined by the AER. This is as per the approved t-1 pricing proposal. |
| $\mathrm{B_{t-1}}$ | the sum of annual adjustment factors for year t. It includes adjustments to balance the unders/overs account, relating to previous under/over-recoveries of revenue. This is as per the approved t-1 pricing proposal. For the avoidance of doubt, the B factor for t-1 should be equal to that used to calculate t-1 revenue in the previous pricing proposal and should not be updated for movements in the unders/overs accounts in the year t pricing proposal. |
| $\mathrm{TAR_{t-1}}$ | the total allowable revenue for year t-1, calculated using the revenue cap control formula in the preceding year. |
| $\mathrm{t}$ | the forecast regulatory year. |

[26] NER cl. 6.18.6(c).

# B Unders and overs mechanism

To demonstrate compliance with the distribution determination applicable to it during the 2024–29 period, distributors must comply with the unders and overs mechanism in their annual pricing proposals.

Separate unders and overs mechanisms must be maintained for each of the following:

- Distribution use of system (DUoS) charges
- Designated pricing proposal charges (DPPC)[27] [28]
- Jurisdictional scheme amounts (JSA)[29] [30]
- Metering services, where under a revenue cap.

The unders and overs mechanism incorporates both an unders and overs statement and an unders and overs account. The unders and overs statement provides the revenues and expenditures (or allowed revenues for revenue caps) and calculates under or over-recoveries. The unders and overs account carries forward under and over-recoveries from previous years, applies the time value of money, and calculates the balancing adjustment to be applied to the revenue cap to balance the account each year.

The unders and overs statement must include the following entries for the most recently completed regulatory year (t–2), the current regulatory year (t–1) and the next (or forecast) regulatory year (t). An example of an unders and overs statement is provided in Table 14-1.

- Forecast/estimated/actual revenue:
  - For DPPC, this will include cross-boundary revenue.
  - To include any deliberate under-recoveries, which will be added to recovered revenue, as this is not able to be recovered in future years (see section 14.4.3 above).
  - To include any unpaid network charges resulting from ROLR events (see section 14.4.4).
- Applicable revenue caps for DUoS charges (and metering services where applicable) – these revenue caps are fixed over time and are not updated in subsequent years.
- Forecast/estimated/actual expenditure for DPPC and JSA – these items should be itemised as provided for in the annual pricing proposal template.
- The balancing adjustment (b-factor) for each year – these adjustments are fixed over time and are not updated in subsequent years.

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27 DPPC generally related to amounts passed through by a distributor in relation to the transmission of electricity from or to networks outside of their own. DPPC are specified in more detail in NER clause 11.39.

28 NER, cll. 6.18.2(b)(6), 6.12.1(19), 6.18.7.

29 Jurisdictional scheme amounts are amounts passed through under a jurisdictional scheme approved by the AER or prescribed in the NER.

30 NER, cll. 6.12.1(20), 6.18.2(b)(6A), 6.18.7A(b) and (c).

### Table 14-1 Example unders and overs statement ($'000, nominal)

| | | Year t–2 (actual) | Year t–1 (estimate) | Year t (forecast) |
|---|---|---|---|---|
| Revenue from charges | i | 100 000 | 103 000 | 92 266 |
| Cross-boundary revenue (DPPC only) | ii | | | |
| Deliberate under-recoveries | iii | 50 | 50 | 50 |
| Unpaid network charges (ROLR) | iv | 10 | | |
| **Total revenue** | i + ii + iii - iv = **A** | **100 040** | **103 050** | **92 316** |
| Total allowable revenue [a]/DPPC or JSA expenditure [b] | | 98 000 | 99 000 | 100 000 |
| **Total allowable revenue/Total DPPC expenditure/Total JSA expenditure** | **B** | **98 000** | **99 000** | **100 000** |
| **Total under/over recovery of revenue for regulatory year** | A - B = **C** | 2 040 | 4 050 | -7 684 |
| Balancing adjustment (b-factor) made when year was 't' [c] | D | 5 000 | 5 000 | -7 684 [d] |
| **Net under/over recovery of revenue for regulatory year** | C - D = **E** | **-2 960** | **-950** | **0** |

Notes: (a) Total allowable revenue for a revenue cap should exclude the balancing adjustment applied for revenue under/over recovery for the regulatory year and are therefore expected to equal the sum of the remaining annual adjustments, excluding $b_t$, as set out in Figure 14-1.
(b) DPPC and JSA expenditure will be itemised in their respective unders and overs statement in line with the annual pricing proposal template.
(c) The balancing adjustment applied in the revenue cap for each relevant regulatory year. This is as approved in the relevant pricing proposal and should remain unchanged.
(d) Approved DUoS revenue under/over recovery for regulatory year t.

The unders and overs account must include the following entries for the most recently completed regulatory year (t–2), the current regulatory year (t–1) and the next (or forecast) regulatory year (t). An example unders and overs account is provided in Table 14-2.

1. Opening balances for each regulatory year (reflecting the closing balance of the previous year).
2. An interest charge for one year on the opening balance for each regulatory year.
3. The net under or over recovery calculated in the unders and overs statement for each regulatory year, and any applicable adjustment to remove under or over recovery amounts from the account.[31]

[31] These adjustments include, but are not limited to, bespoke smoothing arrangements set in our Determination in response to significant unforeseen events, jurisdictional schemes that treat under or over recoveries within the scheme.

4. An interest charge for 6 months on the net under or over recovery for each regulatory year.
5. The total sum of items 1–4 to derive the closing balance for each regulatory year.

**Table 14-2 Example unders and overs account ($'000, nominal)**

| | | Year t–2 (actual) | Year t–1 (estimate) | Year t (forecast) |
|---|---|---|---|---|
| Adjusted nominal WACC (per cent) | F | 5.00% | 5.50% | 6.00% |
| Opening balance | G | 1 000 | 3 140[a] | 7 463 |
| Interest on opening balance | F x G = **H** | 50 | 173 | 448 |
| Under/over recovery of revenue for regulatory year | E (from statement) | 2 040 | 4 050 | -7 684 |
| Adjustment | I | 0 | 0 | 0 |
| Interest on under/over recovery for regulatory year | (E – I) x $F^{0.5}$ = **J** | 50 | 100 | -227 |
| **Closing balance** | G + H + E + I + J = **K** | **3 140** | **7 463** | **0**[b] |

Notes: (a) Opening balance is the previous year's closing balance.
(b) Distributors are expected to achieve a closing balance as close to zero as practicable (and ≤0) in their unders and overs accounts in each forecast year in their annual pricing proposals.

Interest charges are to be calculated using the relevant adjusted nominal WACC. The adjusted nominal WACC applied for each year will be the real vanilla WACC approved by the AER in the relevant annual update, escalated for actual inflation for the relevant year.[32] This is as applied in the revenue cap formulae set out in Figure 14-1.

Distributor's annual pricing proposals must provide details of calculations in the format set out in Table 14-1 and Table 14-2. In general:

- Amounts provided for the most recently completed regulatory year (t–2) must be audited.[33]
- Amounts provided for the current regulatory year (t–1) will be regarded as an estimate.
  - Generally, these estimates would reflect the approved prices for year t-1 multiplied by the estimated quantities for year t-1.

32 If circumstances require, alternative adjustments for an appropriate cost of capital may be applied following consultation between the AER and relevant distributor(s).

33 A reasonable assurance report sufficiently meets these auditing requirements. Where amounts provided match other audited submissions to the AER, further assurance is not required (e.g. RINs), and should be referenced.

  - If not, supporting information should be provided as to how those estimates are calculated and why they should be considered the best estimate of expected revenue for the year.

- Amounts for the next regulatory year (t) will be regarded as a forecast.
  - Generally, these estimates would reflect the prices for year t multiplied by the forecast quantities for year t.
  - If not, supporting information should be provided as to how those forecasts are calculated and why they should be considered reasonable.

In exceptional circumstances, the unders and overs accounts can accommodate additional years, such as year t–3.[34]

To ensure compliance with the NER and the revenue cap form of control, a closing balance as close to zero as practicable, and below zero, is expected to be achieved in each forecast year t.

### Jurisdictional scheme amounts

Jurisdictional scheme amounts are currently mostly made up of amounts related to premium feed-in-tariff schemes. These schemes involve distributors paying premium feed-in-tariff rates for eligible customers. Distributors recover amounts to fund these schemes through network tariffs.

Over the coming years, a number of these premium feed-in-tariff schemes will cease. As a result, there may be no ongoing jurisdictional scheme amounts, and true-ups of the recovered revenues may continue in perpetuity in smaller and smaller amounts.

We consider it appropriate that if in a particular year, there is no forecast jurisdictional scheme amounts for that year, or for future years, that any residual amounts in that year will be moved out of the unders and overs account. These amounts will be applied as an adjustment in the distribution revenue control mechanism and allow the jurisdictional scheme unders and overs account to balance to 0. For the avoidance of doubt, this adjustment will occur in the year following the cessation of a jurisdictional scheme, being the first year that there the forecast jurisdictional scheme amounts are $0, and where there are no continuing jurisdictional scheme amounts forecast for future years.

If at any point jurisdictional schemes are subsidised, subsidy amounts will be considered to be revenues for the purpose of the unders and overs mechanism. These amounts will still need to be ‘trued-up’, to ensure the distributor does not recover more or less than they otherwise should.

[34] Subject to AER approval. Any amounts provided for additional years prior to t-2 must be audited.

# C Annual pricing proposals

In line with our approach established through the annual pricing process review,[35] the AER will provide pre-filled standardised pricing proposal models for distributors to use in submitting their annual pricing proposals.

Each January of the 2024–29 period, we will provide distributors with pre-filled pricing proposal models to be used when submitting pricing proposals. These pre-filled models will include annual adjustments, revenue and cost true-up amounts from regulatory information notices or other sources, CPI and annual return on debt updates, and other components known by the AER. Pre-filling this data allows for the AER to verify inputs prior to the short timelines allowed within the pricing approval process.

We will also use these models during our pre-lodgement engagement process with distributors during February and March. This process is used to confirm pre-filled inputs and engage on other inputs known to the distributor at this time such as consumption forecasts. This process will also allow us to confirm the correct application of the price cap mechanisms for alternative control services in advance of the pricing proposal submissions.

These processes will lead to annual pricing proposals that are more likely to be capable of approval without revision and able to be approved in a timely manner.

In their pricing proposals, distributors should also:

- provide a completed 'Statement of Compliance' using the AER's template,
- provide a confidentiality template using the AER's template,
- provide public versions of any confidential models or documents for publication,
- use version numbers in filenames for easy identification of revision by stakeholders (in the format of v1, v2, v3, etc.), and
- provide details on methodologies and any supporting information for any forecasts provided (e.g., consumption forecasts).

The AER will set expectations prior to each process, which may outline further things for the distributors to consider when submitting pricing proposals.

[35] AER, *Annual pricing process review – Final position paper*, December 2022.

# D Rounding

The following sets out our final decision on how distributors should use calculation inputs (i.e., whether on a rounded or unrounded basis) in their annual pricing proposals to demonstrate compliance.

### Unrounded inputs to be used in calculations

'Unrounded', for this purpose, will be taken to mean at least 15-digit floating point precision (the level of accuracy at which numbers will be stored in Microsoft Excel workbooks of .XLS, .XLSX, .XLSM or .XLSB). This definition accepts that numbers with fewer than fifteen floating digits may not require 15 digits to express (such as 2.25 being equivalent to 2.25000000000000) but will meet the definition of 15-digit floating point precision.

Unrounded values should be maintained throughout calculations. Where a calculation produces an output which is to be used as an input in another calculation, rounding should not occur. Rounding should be applied to final outputs only, unless otherwise specified.

Unrounded inputs should be taken from approved Excel models where appropriate. X-factors should be unrounded inputs taken from the approved model. Where appropriate, inputs should be calculated as an alternative to using a rounded value.

For example, inflation should be calculated based around the CPI tables as provided by the ABS, or the AER's nominated best available substitute should this index cease to be calculated. The result of this calculation should be taken as is, not rounded before use. Table 14-3 sets out the required level of precision for an inflation calculation.

**Table 14-3 Demonstration of inflation calculation**

| | Required Precision |
|---|---|
| The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2 (example) | 112.1 |
| The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1 (example) | 114.6 |
| $\Delta CPI_t$ | 2.23015165031222% |

Unrounded inputs include all those not specified below as suitable to be rounded in a given situation.

### Instances where rounding is acceptable

In general, rounding in calculations must be done on a 'nearest' basis. Rounding to two decimal places means rounding to the nearest two decimal places, not rounding up automatically or down automatically. This accepts the convention that if a number falls precisely between two points, it can be rounded up (e.g. 2.245 can be rounded to 2.25 rather than 2.24). An exception to this for prices charged by the distributor is noted below, as these must be less than or equal to the price cap.

Prices under a price cap or a revenue cap should be input as billed. That is, if billing systems calculate charges based on a value rounded to 4 decimal places, then the input into the pricing proposal for actual or proposed prices should also be rounded to 4 decimal places to reflect the actual prices charged.

### Price cap control mechanism formulae

When applying a price cap, the value should be rounded to the nearest two decimal places each year. When calculating the value of the price cap for the following period, the rounded value of the previous year's price cap must be used to determine the value of the new price cap to ensure consistency in the price cap from year-to-year.

**Table 14-4 Demonstration of price cap calculation (with rounding)**

| | Required Precision |
|---|---|
| $\bar{p}^{i}_{t-1}$ | $23.28 |
| X factor (example: should be taken from model) | -7.12546236955321% |
| $\Delta CPI_t$ | 2.23015165031222% |
| $\bar{p}^{i}_{t}$ (unrounded) | $25.4938708296164 |
| $\bar{p}^{i}_{t}$ (rounded) | $25.49 |

Prices charged by the distributor can be rounded to as few or as many decimal places as required, subject to being less than or equal to the two decimal place value of the price cap. In the above table, this would mean a price of $25.49 would be acceptable, as would a price of $25.4899. However, a price of $25.493 would not be compliant.

For the avoidance of ambiguity, where a price is expressible as a rate for a period of time, rounding of the price cap, and the demonstration of compliance, will apply to the largest relevant time period. So the price of an hourly service will be capped on an hourly basis. However, a service which can be priced either on a daily rate or an annual rate will have rounding apply to the cap on the annual rate. The daily rate should then represent the annual rate divided by 365, or 366 if the regulatory year to which the price applies is a leap year. This resulting daily rate may be expressed on a rounded basis (with discretion on the appropriate level of decimal places to apply) but must be based on a rounding to the nearest decimal place.

# Shortened forms

| Term | Definition |
|---|---|
| AEMC | Australian Energy Market Commission |
| ABS | Australian Bureau of Statistics |
| AER | Australian Energy Regulator |
| CESS | capital expenditure sharing scheme |
| CPI | consumer price index |
| CSIS | customer service incentive scheme |
| DMIAM | demand management innovation allowance mechanism |
| DMIS | demand management incentive scheme |
| DPPC | designated pricing proposal charges |
| DUoS | distribution use of system |
| EBSS | efficiency benefit sharing scheme |
| ESIS | export service incentive scheme |
| F&A | framework and approach |
| JSA | jurisdictional scheme amounts |
| LED | light-emitting diode |
| NEL | national electricity law |
| NEM | national electricity market |
| NER | national electricity rules |
| opex | operating expenditure |
| PTRM | post-tax revenue model |
| STPIS | service target performance incentive scheme |
| WACC | weighted average cost of capital |