

4.06

# Control mechanism for Standard Control Services and Alternative Control Services

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# 1 INTRODUCTION

In its Framework and Approach (F&A) paper, the Australian Energy Regulator (AER) determined that the form of control to apply to standard control services would be a revenue cap. The F&A paper set out the proposed formula to give effective to the revenue cap.

In this attachment, we set out our considerations on the AER's proposed control formula for standard control services, our proposed amendments to the formula and how we consider the formula should be applied in the next regulatory control period<sup>1</sup>.

This attachment addresses the following RIN Schedule 1 requirements:

- 3.1 *For the forecast revenues that Ausgrid proposes to recover from providing direct control services over the forthcoming regulatory control period provide:*
  - a. *Formulaic expressions for the basis of control mechanisms for standard control services and for alternative control services; and*
  - b. *A detailed explanation and justification for each component that makes up the formulaic expression.*
- 3.2 *Also demonstrate:*
  - a. *How Ausgrid considers the control mechanisms are compliant with the framework and approach paper; and*
  - b. *For standard control services, how Ausgrid considers the control mechanisms are also compliant with clause 6.2.6 and part C of Chapter 6 of the NER<sup>2</sup>.*

This document also sets out our proposed approach to:

- The control formula for revenue from our dual function assets (i.e. transmission standard control services)
- Reporting on the recovery of jurisdictional scheme amounts (NSW Climate Change Fund) DUOS overs and unders account and designated pricing proposal charges<sup>3</sup>.

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<sup>1</sup> National Electricity Rules, clause 6.12.1(11).

<sup>2</sup> Australian Energy Regulator, *Regulatory Information Notice under Division 4 of Part 3 of the National Electricity (new South Wales) Law*, 20 October 2017, p.8-9.

<sup>3</sup> National Electricity Rules, clause 6.12.1(20) and (21).

## 2 FORM OF CONTROL MECHANISM FOR STANDARD CONTROL SERVICES

This section provides our proposed approach to the application the control mechanisms and how we propose to demonstrate compliance with the control mechanism for standard control services.

### 2.1 Proposed control formula for distribution standard control services

The AER proposed the following formulaic expression to give effect to the revenue cap on distribution standard control services in the next regulatory control period:

**Figure 1. AER's proposed control mechanism for standard control services**

$$TAR_t = \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij} \quad i = 1, \dots, n \text{ and } j = 1, \dots, m \text{ and } t = 1, 2, \dots, 5$$

$$TAR_t = AAR_t + I_t + B_t + C_t \quad t = 1, 2, \dots, 5$$

$$AAR_t = AR_t \cdot (1 + S_t) \quad t = 1$$

$$AAR_t = AAR_{t-1} \cdot (1 + DCPI_t) \cdot (1 - X_t) \cdot (1 + S_t) \quad t = 2, \dots, 5$$

Where:

$TAR_t$	Is the total allowable revenue in year t
$p_t^{ij}$	Is the price of component 'j' of tariff 'i' in year t
$q_t^{ij}$	Is the forecast quantity of component 'j' of tariff 'i' in year t
$t$	Is the regulatory year
$AR_t$	Is the annual smoothed revenue requirement for year t
$AAR_t$	Is the adjusted annual smoothed revenue requirement for year t
$I_t$	Is the sum of incentive scheme adjustments in year t
$B_t$	Is the sum of annual adjustment factors in year t
$C_t$	Is the sum of approved cost pass through amounts and any end-of-period adjustments in year t
$S_t$	Is the s-factor for regulatory year t
$\Delta CPI_t$	Is the annual percentage change in the consumer price index (CPI)
$X_t$	Is the X-factor in year t, incorporating adjustments for the trailing cost of debt.

Ausgrid has made a number of assumptions about each of these parameters in order to develop indicative pricing schedules as required by clause 6.8.2(c) of the Rules. The following sections set out our assumptions and proposed approaches to these parameters.

## 2.2 Total allowable revenue

Ausgrid agrees with the general formula for determining the Total Allowable Revenue and we set out below how we consider each component of this formula would apply, including a minor proposed clarification to account for the timing of the S and I factors.

## 2.3 Incentive scheme adjustments (It)

The AER has at this stage provided limited detail on the specific calculation of the sum of the incentive scheme adjustments (It). Ausgrid has assumed that this includes the annual adjustments to the revenue allowance during the course of the next regulatory control period that arise as a result of the operation of an incentive scheme applied in the current regulatory control period (i.e. 2014-19).

We have assumed that this is limited to the results of the application of demand management incentive scheme (DMIS and DMIA) in the current and next regulatory control period.

The results of the application of other incentive schemes such as EBSS, CESS and STPIS are accounted for elsewhere. For the STPIS, the adjustments for the application of the STPIS are accounted for in the S-factor (see below). For the EBSS (which does not apply to Ausgrid for the 2014-19 period) and CESS, the adjustments are accounted for as part of the revenue building block for the next regulatory control period.

For clarity, Ausgrid proposes that the AER makes it clear in its final decision for the 2019-24 that the incentive scheme adjustments for DMIS and DMIA operate on a two years lag. That is, result from year t is not incorporated until the pricing proposal for year t+2.

For the purpose of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal, we have assumed nil adjustments for the application of DMIS and DMIA during the next regulatory control period.

## 2.4 Annual adjustment factors (Bt)

The AER has indicated that the details for the annual adjustment factors would be determined in the distribution determination, but that it is likely to incorporate but not be limited to adjustments for the overs and unders account.

For the purposes of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal, we have assumed that the value of the annual adjustment factors is nil.

## 2.5 Pass through and end-of-period adjustments (Ct)

The AER has indicated that the Ct is to include the sum of any approved cost pass through amounts (positive or negative) and any end-of-period adjustments, with the details to be decided in the distribution determination.

At this stage, it is not clear what the AER has in mind by reference to 'end of period' adjustments. To avoid any doubt or ambiguity, we request clarification on this aspect of the C factor.

For the purpose of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal, we have assumed nil cost pass through amounts or end of period adjustments.

## 2.6 S-factor adjustment (St)

The AER proposes to include the S-factor to account for any revenue increments or decrements resulting from the application of the STPIS, including the application of the STPIS in the current regulatory control period (i.e. 2014-19). Similar to the I factor, the S factor operates on a two year lag. We propose the AER makes this clear in its final decision on the control formulae.

Ausgrid has assumed that the calculation of the S-factor will be consistent with the applicable scheme for the current and next regulatory control period. Attachment 9.01 provides further information on how Ausgrid believes the STPIS should be applied in the next regulatory control period.

For the purpose of setting indicative prices for inclusion in our Regulatory Proposal, Ausgrid has not taken into account the forecast annual revenue increments or decrements arising from the operation of STPIS during the next regulatory control period.

## 2.7 Annual percentage change in the Consumer price index

Ausgrid has assumed that the AER will calculate the percentage change in CPI as follows:

$$\Delta CPI = \frac{CPI_{Dec\ t-2}}{CPI_{Dec\ t-1}} - 1$$

Where the CPI is the ABS CPI All Groups, Weighted Average of Eight Capital Cities index for the respective quarter, or the AER ceases to publish such an index, then CPI will mean an index which the AER considers is the best estimate of the index.

For the purpose of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal, we have assumed that CPI is equal to 2.5% in each regulatory year.

## 2.8 X-factor (Xt)

We note that the X factor will be updated annually to account for the annual update to the cost of debt component of the rate of return (if such approach is decided in the final determination).

For the purpose of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal, we have applied the X-factors set out in the PTRM (see Attachment 4.02).

## 2.9 Overs and Unders adjustment

We note that the AER proposed revenue cap control mechanism does not include a parameter relating to the operation of the overs and unders mechanism. We believe that this parameter must be included in the control mechanism formula as we understand it is the intention of the AER to continue with the current approach where compliance with the revenue cap control mechanism at each annual price reset is based on setting prices in a manner that equates the forecast tariff revenue with the total allowed revenue for a given year.

The total allowed revenue includes an adjustment for an overs and unders from the prior year. For the next regulatory control period, we propose to use the current approach to

demonstrating compliance with distribution revenue cap form of control mechanism, as illustrated in the table below. Ausgrid will target an expected zero balance on its DUOS unders and overs accounts at the end of each regulatory year of the regulatory control period.

**Table 1. Proposed approach to reporting on DUOS (indicative only)**

Financial Year Ending	Units	Period t-2	Period t-1	Period t
		Actual	Expected	Forecast
<b>Inputs</b>				
Revenue from network charges (DUOS)	\$000s	39,279	34,249	35,849
Total allowable revenue	\$000s	33,681	37,964	38,420
<b>Overs and Unders Account (DUOS)</b>				
Interest rate applicable to balance	%	8.80%	8.80%	7.57%
Opening balance overs/(unders)	\$000s	0	5,840	2,479
Interest on opening balance (365 days)	\$000s	0	514	188
Over/(under) recover for financial year	\$000s	5,598	-3,714	-2,571
Interest on over/(under) recovery for financial year	\$000s	241	-160	-96
Closing balance of overs/(unders) account	\$000s	5,840	2,479	0

NOTE: Example provided for illustration purposes only.

## 2.10 Proposed control formula for transmission standard control services

We note that the AER's F&A did not specify a control formula for transmission standard control services. For the purpose of completeness and clarity, we consider the control formula for transmission control services applicable for the current 2014-19 period should be adopted for the 2019-24 period. We have extracted this formula below.

$$MAR_t = AR_t \pm PT_t$$

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

Where:

$MAR_t$	Is the maximum allowable average revenue in year t
$AR_t$	Is the annual smoothed expected revenue for year t. For the 2019–20 regulatory year, it is the annual smoothed expected revenue in the Post Tax Revenue Model for the regulatory year 2019-20
$PT_t$	Is an annual adjustment factor that reflects the pass through amounts approved by the AER with respect to regulatory year t
$\Delta CPI_t$	Is the annual percentage change in the Australian Bureau of Statistics (ABS) Consumer Price Index All Groups, Weighted Average of Eight Capital Cities from December in year t–2 to December in year t–1
$X_t$	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 return on debt appendix I calculated for the relevant year.

We note that there is no requirement to include an overs and unders parameter to our transmission revenue cap control mechanism because we are not setting transmission charges and are therefore not exposed to volume risk. The overs and unders mechanism of

relevance to the recovery of transmission-related costs applies to Ausgrid only in the context of the setting of designated pricing proposal charges each year.



### 3 CONTROL MECHANISM FOR ALTERNATIVE CONTROL SERVICES

Alternative control services comprise of public lighting, type 5-6 metering services and ancillary network services. Ancillary network services are further divided into fee-based and quoted services. We adopt the control formulae as specified by the AER in its final F&A paper for Ausgrid.

#### 3.1 Price cap formula to apply to the NSW distributors' legacy metering, public lighting and ancillary services (fee based)

The proposed price cap formula for metering, public lighting and fee-based ancillary services is:

$$\bar{p}_t^i \geq p_t^i \quad i=1, \dots, n \text{ and } t=1, 2, \dots, 5$$

$$\bar{p}_t^i = \bar{p}_{t-1}^i \cdot (1 + DCPI_t) \cdot (1 - X_t^i) + A_t^i$$

Where:

- $\bar{p}_t^i$  Is the cap on the price of service i in year t
- $p_t^i$  Is the price of service i in year t. The initial value is to be decided in the distribution determination
- $\bar{p}_{t-1}^i$  Is the cap on the price of service i in year t-1
- $t$  Is the regulatory year.

$DCPI_t$  is the annual percentage change in the ABS consumer price index (CPI) All Groups, Weighted Average of Eight Capital Cities<sup>4</sup> from the December quarter in year t-2 to the December quarter in year t-1, calculated using the following method:

- The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t-1
- divided by
- The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t-2
- minus one.

For example, for 2020-21, year t-2 is the December quarter 2018 and year t-1 is the December quarter 2019.

- $X_t^i$  Is the X factor for service i in year t. The X factors are to be decided in the distribution determination and will be based on the approach the distributor undertakes to develop its initial prices.
- $A_t^i$  Is the sum of any adjustments for service i in year t. Likely to include, but not limited to adjustments for any approved cost pass through amounts (positive or negative) with respect to regulatory year t, as determined by the AER.

<sup>4</sup> 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.

## 3.2 Price cap formula to apply to the NSW distributors' quoted services

The proposed price cap formula for quoted-fee ancillary services is:

$$Price = Labour + Contractor Services + Materials$$

Where:

Labour consists of all 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  $(1 + DCPI_t)(1 - X_t^i)$  where:

$DCPI_t$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities<sup>5</sup> from the December quarter in year t-2 to the December quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t-1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t-2

minus one.

For example, for 2020-21, year t-2 is the December quarter 2018 and year t-1 is the December quarter 2019.

$X_t^i$  Is the X factor for service i in year t. The X factor is to be decided in the distribution determination and will be based on the approach the distributor undertakes to develop its initial prices

*Contractor Services* Reflect all 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* Reflect the cost of materials directly incurred in the provision of the service, material storage and logistics on-costs and overheads.

Regarding the application of the control formulae for alternative control services, we note the following:

- In the case of public lighting prices, there are separate charges for each individual lamp types, reflecting the costs of maintenance. To determine the prices for each of these lamp types for each year of the 2019-24 regulatory period, we propose that there be individual X factors applying to the control mechanism formulae above. Each of these X factors represents the labour escalators for each lamp type for each regulatory year. These labour escalators would be determined by the AER in its final decision on the pricing of public lighting services. This approach is the same as that currently applies in the current regulatory period. For clarification, there would not be one overall X factor for maintenance charges but rather there would be multiple X factors, one for each lamp type.
- We note that there may be new services that arise during the regulatory control period and this new service may fall within one of the existing services. In such cases, Ausgrid

<sup>5</sup> 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.

proposes to adopt the same (a) control mechanism for the existing service group – i.e. a cap on price; (b) the same control formulae as stated above and (c) the same pricing approach established and approved by the AER for the service grouping.

## 4 JURISDICTIONAL SCHEME AMOUNTS

For the 2019-24 control period, Ausgrid will have an ongoing obligation to make an annual contribution to the NSW Climate Change Fund (CCF), which was established by the NSW Government to address the impacts of climate change and encourage energy and water efficiency.

The CCF is a jurisdictional scheme under the National Electricity Rules, which means that Ausgrid is entitled to recover the contributions imposed by the NSW Government as “jurisdictional scheme amounts”. The contributions made by Ausgrid to the CCF are not related to the network services that we provide, and are separate to the maximum revenue or prices we charge customers for direct control services.

We propose the same mechanism for reporting on the recovery of jurisdictional scheme amounts to that which is in place for the current regulatory control period, including the mechanism for adjusting for under or over recovery of scheme amounts. The current mechanism is based on the audited closing balance in year t-2, and an estimate of the closing balance in year t-1. The over or under recovery in year t-1 is recovered via an adjustment in year t.

This information is reported in the annual pricing proposal, in the form of a table similar to the one shown below.

**Table 2. Proposed reporting on recovery of jurisdictional scheme amounts (indicative only)**

Financial Year Ending	Units	Period t-2	Period t-1	Period t
		Actual	Expected	Forecast
<b>Inputs</b>				
Revenue from Climate Change Fund Recovery	\$000s	19,579	22,890	26,616
Climate Change Fund Contribution	\$000s	20,069	20,749	28,355
<b>Overs and Unders Account (CCF)</b>				
Interest rate applicable to balance	%	8.80%	8.80%	7.57%
Opening balance overs/(unders)	\$000s	0	-511	1,676
Interest on opening balance (365 days)	\$000s	0	-45	127
Over/(under) recover for financial year	\$000s	-490	2,140	-1,739
Interest on over/(under) recovery for financial year	\$000s	-21	92	-65
Closing balance of overs/(unders) account	\$000s	-511	1,676	0

NOTE: Example provided for illustration purposes only.

Ausgrid will target a zero balance in the overs and unders account for jurisdictional scheme amounts in each year of the regulatory control period.

For the purpose of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal<sup>6</sup>, we have set the CCF prices in 2018/19 on the basis of our enforceable undertaking to the AER and over the next regulatory control period on the basis of targeting a zero closing balance of the CCF overs and unders account each year.

<sup>6</sup> Note: Ausgrid has attached to its TSS proposal for the next regulatory control period a separate indicative pricing schedule for the CCF component.

## 5 DESIGNATED PRICING PROPOSAL CHARGES

Our network tariffs also include an amount for designated pricing proposal charges<sup>7</sup>, which relate to payments made for the use of the transmission network in NSW; payments made to embedded generators for avoided transmission costs; and payments we make to other DNSPs for the use of their network. It comprises primarily charges paid to Transgrid but also incorporate the maximum revenue we are permitted to collect for Ausgrid's transmission standard control services. These charges are reflected in the TUOS tariffs.

We propose the same mechanism for reporting on the recovery of designated pricing proposal charges to that which is in place for the current regulatory control period, including the mechanism for adjusting for over or under recovery of those charges. The current mechanism is based on the audited closing balance in year t-2, and an estimate of the closing balance in year t-1. The over or under recovery in year t-1 is recovered via an adjustment in year t.

This information is reported in the annual pricing proposal, in the form of a table similar to the one shown below.

**Table 3. Proposed reporting on recovery of designated pricing proposal charges (indicative only)**

Financial Year Ending	Units	Period t-2	Period t-1	Period t
		Actual	Expected	Forecast
<b>Inputs</b>				
Revenue from designated pricing proposal charges	\$000s	39,676	34,595	36,211
Total designated pricing proposal charges paid	\$000s	34,021	38,347	38,808
<b>Overs and Unders Account (DPPC)</b>				
Interest rate applicable to balance	%	8.80%	8.80%	7.57%
Opening balance overs/(unders)	\$000s	0	5,898	2,504
Interest on opening balance (365 days)	\$000s	0	519	189
Over/(under) recover for financial year	\$000s	5,655	-3,752	-2,597
Interest on over/(under) recovery for financial year	\$000s	244	-162	-96
Closing balance of overs/(unders) account	\$000s	5,898	2,504	0

NOTE: Example provided for illustration purposes only.

Ausgrid will set TUOS tariffs to target a zero balance in the overs and unders account for designated pricing proposal charges in each year of the regulatory control period.

For the purpose of setting indicative prices for the next regulatory control period for inclusion in our Regulatory Proposal<sup>8</sup>, we have set the TUOS prices in 2018/19 on the basis of our enforceable undertaking to the AER and over the next regulatory control period on the basis of targeting a zero closing balance of the TUOS overs and unders account each year.

<sup>7</sup> Note: we have used the term Transmission Use of System (TUOS) charges and Designated Pricing Proposal Charges interchangeably in this document.

<sup>8</sup> Note: Ausgrid has attached to its TSS proposal for the next regulatory control period a separate indicative pricing schedule for the TUOS component.