04.01.00

Compliance with control mechanisms

Revision history

Version	Date	Summary of changes
1.0	31 October 2014	As submitted to the AER as part of the initial Regulatory Proposal
2.0	3 July 2015	As submitted to the AER as part of the revised Regulatory Proposal

Contents

1 Introduction

1.1 Overview

The Australian Energy Regulator's (AER) distribution determination for the regulatory control period 2015-20 will impose controls over Ergon Energy's various regulated services. These controls (control mechanisms) can be in the form of:

- controls over prices
- controls on the revenue derived from the service, or
- both.[1]

The AER decided on the form of control mechanisms in its Framework and Approach Paper.[2] Additionally, the formulae that gives effect to the control mechanisms have been determined in the Framework and Approach Paper, unless the AER considers that unforeseen circumstances justify departing from the formulae set out in that paper.[3]

The AER decided to apply the following forms of control in the regulatory control period 2015-20:[4]

- For Standard Control Services, the AER decided to apply controls on the revenue derived from these services.
- For services classified as Alternative Control Services, the AER decided to apply caps on the prices of individual services.

Sections 2.3.9 and 2.4.6 of the Framework and Approach Paper set out the formulae that the AER initially proposed to apply for Standard Control and Alternative Control Services, respectively. In its Preliminary Determination, the AER departed from the Standard Control Services formula. The AER also made some changes to the formula applying to services priced on a quoted basis.

Ergon Energy does not support these changes. Our submission responses, S*CS Building Blocks, Control Mechanism and Pricing* and *Alternative Control Services – Other – Response*, provide our rationale for these positions. We have generally adopted the formulae contained in the Framework and Approach Paper in our revised Regulatory Proposal.

This document (and supporting model) sets out how we have applied the formulae in preparing our revised Regulatory Proposal and how we expect these controls will operate over our revenue and prices during the regulatory control period 2015-20.

It also sets out our proposed approach on various matters underpinning the application of the formulae, and how we consider these comply with the National Electricity Rules (NER), Framework and Approach Paper and/or Preliminary Determination.

Finally, we note as part of the Reset Regulatory Information Notice (Reset RIN) the AER requested Ergon Energy provide the following information:[5]

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[1] NER, clause 6.2.5(a).
[2] NER, clause 6.12.3(c).
[3] NER, clause 6.12.3(c1).
[4] AER Framework and Approach Paper, p52
[5] Reset RIN, Schedule 1, paragraph 3.

For the proposed forecast revenues that Ergon Energy estimates 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.

Also demonstrate:

(a) how Ergon Energy considers the control mechanisms are compliant with the Framework and Approach Paper; and
(b) for Standard Control Services, how Ergon Energy considers the control mechanisms are also compliant with clause 6.2.6 and Part C of Chapter 6 of the NER.

To the extent that this information is not already included in the AER's Framework and Approach Paper, Preliminary Determination or AER models (such as the Post Tax Revenue Model (PTRM)), we outline additional information here.

1.2 Allocation of services to controls

The following table summarises the revenue and pricing controls proposed for the regulatory control period 2015-20.[6]

Table 1: Summary of revenue and pricing controls

Classification	AER's form of control	Compliance with the control mechanism

Standard Control Services including:
• Network Services
• Pre-Connection Services related to:
  o general connection enquiries
• Connection Services related to:
  o small customer connections
• Post Connection Services related to:
  o operating and maintaining connection assets
• Type 7 metering services.
	Revenue cap	The AER has effectively applied three formulas for revenue cap controls in its Framework and Approach Paper:
		• a revenue cap formula which the AER states is determined by the PTRM and the outworking of Part C of Chapter 6 of the NER (formula 1)
		• a formula for Total Allowed Revenue which the AER states takes into account other adjustments outside the Annual Revenue Requirement (ARR) determined by the PTRM (formula 2)
		• a formula which the AER has decided is the expression which Ergon Energy will use to demonstrate compliance with formula (1) and (2) in its initial and annual Pricing Proposals.
		Compliance with these formulae will essentially be demonstrated through the AER's models for calculating revenue requirements and through the detailed Pricing Proposals Ergon Energy will submit to the AER each year. Further information on how Ergon Energy has applied the AER's formulae and considers compliance can be demonstrated is outlined in Section 3 and Appendix 1 of this document.

[6] Refer to our supporting document *02.01.01 – (Revised) Classification Proposal* for details of how our services are classified.

Classification	AER's form of control	Compliance with the control mechanism

Alternative Control Services related to:[7]
• Pre-connection Services for:
  o application fees for basic or standard connections, and real estate development connections
  o protection and power quality assessment prior to connection
• Connection Services associated with a temporary connection
• Post Connection Services associated with:
  o supply abolishment during business hours
  o de-energisation and re-energisation during business hours
• Type 5 and 6 meter installation and provision (on or after 1 July 2015), where the new or upgraded meter is required as a result of a customer request (during business hours)
• Accreditation of alternative service providers – real estate developments
• Prevented access.
	Caps on the prices of individual services (provided on a fixed fee basis)	The AER's Preliminary Determination includes a formula which we will apply to fee based services, subject to minor modifications.[8]
		Our fee based services charges are explained in:
		• Chapter 5 of our revised Regulatory Proposal (*Controls on revenues and prices for Alternative Control Services*)
		• *05.05.01 – (Revised) Inputs and Assumptions for Alternative Control Services*
		• our model outlined in *05.06.02 – (Revised) Fee based services model*.
		These documents contain specific detail around the inputs and assumptions we have applied in developing prices for fee based services.
		Compliance with the price caps will be demonstrated though annual Pricing Proposal processes. Further information on how Ergon Energy considers compliance can be demonstrated is outlined in Section 4 and Appendix 2 of this document.

Alternative Control Services related to:
• Default Metering Services:
  o Type 5 or 6 meter installation and provision (before 1 July 2015)
  o Type 5 and 6 meter installation and provision (on or after 1 July 2015) where the replacement meter is initiated by the distributor
  o Meter repair or replacement
  o Type 5 and 6 metering maintenance, reading and data services
• Provision, construction and maintenance of public lighting (including emerging public lighting technology) ('Public Lighting Services').
	Caps on the prices of individual services	Ergon Energy will apply price cap formulae, consistent with the AER's Preliminary Determination, to Default Metering Services and Public Lighting Services.[9]
		Ergon Energy uses a limited building block approach to determine charges for Public Lighting Services classified as alternative control. This means we determine a revenue allowance using approaches consistent with Part C of the NER as well as calculations set out in the AER's PTRM. Where appropriate we have also sought to apply similar approaches to forecasting, such as the use of base step trend modelling for operating expenditure forecasts.
		The limited building block approach is used to determine allowable revenues for each of these services, which is then converted into unit charges that are subject to a price cap.
		We will use a similar approach for the control mechanism applying to Default Metering Services.
		Our charges for Public Lighting Services and Default Metering Services are explained in:
		• Chapter 5 of our revised Regulatory Proposal (*Controls on revenues and prices for Alternative Control Services*)
		• *05.01.01 – (Revised) Public Lighting Services Summary*

[7] Refer to table 16 of *02.02.01 – (Revised) Classification Proposal* for further detail.
[8] Refer to our submission document, *Alternative Control Services – Other – Response.*
[9] Ergon Energy has some queries in relation to the price cap formulae set out in the Preliminary Determination. Our submission documents, *Metering – Response* and *Public Lighting – Response*, provide further details.

Classification	AER's form of control	Compliance with the control mechanism
		• *05.02.03 – (Revised) Public Lighting Services PTRM* • *05.03.01 – (Revised) Default Metering Services Summary* • *05.04.09 – (Revised) Default Metering Pricing Model.* Once the Default Metering Services and Public Lighting Services arrangements are approved by the AER, Ergon Energy's annual Pricing Proposal will provide further detail on the prices that will be subject to AER approval, consistent with the AER's distribution determination. Further detail on how Ergon Energy considers compliance with the control mechanism can be demonstrated is set out in Section 4 and Appendix 2 of this document.
Other Alternative Control Services[10]	Caps on the prices of individual services (provided on a quoted basis)	Our submission response, *Alternative Control Services – Other – Response,* outlines the formula that will apply for Ergon Energy's quoted services. Our quoted service charges are explained in *05.05.01 – (Revised) Inputs and Assumptions for Alternative Control Services* and our model *05.06.03 – (Revised) Quoted services model.* These documents contain specific detail around the inputs and application of the control mechanism for quoted services. Once these quoted service arrangements are approved by the AER, Ergon Energy's annual Pricing Proposal will provide further detail on indicative quoted service prices and will be subject to AER approval, consistent with the AER's distribution determination. Further information on how Ergon Energy considers compliance with the control mechanism can be demonstrated is set out in Section 4 and Appendix 2 of this document.

[10] For a complete listing, refer to table 16 of *02.01.01 – Classification Proposal.*

2 Compliance with control mechanism for Standard Control Services

2.1 Proposed formula

As noted in Section 1, the AER has effectively applied three formulas for revenue cap controls in the Framework and Approach Paper. Ergon Energy has adopted these formulae with some minor modifications.

2.1.1 Formula to apply to Annual Revenue Requirement

We propose the following formula to give effect to the revenue cap:

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

Where:

AR_t is the allowed revenue for regulatory year t. For the first year of the regulatory control period 2015-20, this amount will be equal to the smoothed revenue requirement for 2015-16 set out in the PTRM approved by the AER. The subsequent years' allowed revenue is determined by adjusting the previous year's allowed revenue for Consumer Price Index (CPI) and the X-factor

ΔCPI_t is the annual percentage change in the Australian Bureau of Statistics (ABS) CPI All Groups, Weighted Average of Eight Capital Cities from December in year t–2 to December in year t–1

X_t is the X-factor for each year of the regulatory control period 2015-20 as determined in the PTRM.

The AER states that this formula represents the outputs of the AER's PTRM. Therefore, compliance with this component of the formula is demonstrated through the preparation of a model in accordance with the AER's PTRM and Part C of Chapter 6 of the NER. Chapter 3 of our revised Regulatory Proposal and our supporting document *03.01.01 – (Revised) Building Block Components* provide further information on how we have prepared our proposed revenue requirement in accordance with the AER's PTRM and Part C of Chapter 6 of the NER.

2.1.2 Formula to apply to Total Allowed Revenue

We propose the following formula to calculate the Total Allowed Revenue (including adjustments):

$$(2)\ TR_t = AR_t + I_t + B_t + C_t$$

Where:

AR_t is the allowed revenue for regulatory year t. For the first year of the regulatory control period 2015-20, this amount will be equal to the smoothed revenue requirement for 2015-16 set out in the PTRM approved by the AER. The subsequent years' allowed revenue is determined by adjusting the previous year's allowed revenue for CPI and the X-factor

TR_t is the total revenue allowable in year t

I_t is the sum of incentive scheme adjustments related to:

- the final carryover amount from the application of the Demand Management Incentive Scheme (DMIS) from the 2010-15 distribution determination. This amount will be deducted from/added to allowed revenue in the 2016-17 pricing proposal
- the Service Target Performance Incentive Scheme (STPIS). This amount will be deducted from/added to allowed revenues in regulatory year t based on the application of the S-factor

B_t is the sum of annual adjustment factors related to:

- any under or over-recoveries relating to capital contributions and shared assets from 2013-14 and 2014-15
- the balance of the DUOS unders and overs account with respect to regulatory year t

C_t is the sum of adjustments related to:

- feed-in tariff cost pass through amounts relating to 2013-14 and 2014-15
- amounts relating to the occurrence of any of the prescribed and nominated cost pass through events
- other one-off adjustments approved by the regulator in year t.

2.1.3 Expression which demonstrates compliance with the first two formulae

The AER's Framework and Approach Paper identified the following expression that it has determined distributors will use to demonstrate compliance with formula 1 and 2 above.

$$TR_t = \sum_{i=1}^{n}\sum_{j=1}^{m} p_{ij}^t q_{ij}^t \qquad i = 1, \dots, n \text{ and } j = 1, \dots, m \text{ and } t = 1, \dots, 5$$

TR_t is the total revenue allowable in year t

p_{ij}^t is the price of component i of tariff j in year t

q_{ij}^t is the forecast quantity of component i of tariff j in year t.

In our revised Regulatory Proposal, Ergon Energy applies the above expression, but we have replaced the equal sign with a greater than or equal to sign (i.e. $TR_t \geq \sum_{i=1}^{n}\sum_{j=1}^{m} p_{ij}^t q_{ij}^t$). This is because it is difficult for the expected revenue to be recovered from all customers via tariffs to exactly equal the revenue cap (e.g. due to rounding of rates or in circumstances where revenues (and prices) are required to be adjusted to satisfy side constraints).

2.2 Applying the above formula to the AER's control mechanism

The AER's proposed control mechanism formula for Standard Control Services has been expressed quite broadly in the Framework and Approach Paper and Preliminary Determination and contains limited detail on calculations underpinning each of the formula components. We do note, however, that the formula is often an outworking of a more detailed model, and the detail of the controls are perhaps better expressed within the model itself.

Ergon Energy's supporting attachments *03.01.04 – Post Tax Revenue Model* and *04.01.05 – (Revised) Control Mechanism Model* contain the methodology and calculations used to produce

the forecast revenues and indicative prices for Standard Control Services in the regulatory control period 2015-20. We have considered the AER's Framework and Approach Paper and Preliminary Determination when preparing these models and have used the outputs for the purpose of satisfying our obligation to produce indicative prices for the regulatory control period 2015-20 under the NER[11] and the Reset RIN.[12]

We also consider our calculation of annual revenue adjustments within the Total Allowed Revenue formula is compliant with the requirements of clause 6.2.6 and Part C of Chapter 6 of the NER. This is because, where possible, we have calculated these amounts in accordance with:

- formulaic expressions provided by the AER under relevant incentive schemes (e.g. STPIS and DMIS)
- formulaic expressions applied in Pricing Proposals in the regulatory control period 2010-15 (which currently comply with NER requirements).

2.2.1 Assumptions used in applying the Total Allowed Revenue formula

Appendix A provides an explanation of each variable in the Total Allowed Revenue formula, including a reconciliation of the variables in this formula with the control mechanism arrangements in the regulatory control period 2010-15.

In addition, the supporting attachment *04.01.05 – (Revised) Control Mechanism Model* provides further detail of the mechanics of the variables as they apply to the Total Allowed Revenue calculation. We have summarised the variables in the formula below.

Allowed revenue – AR_t

As the Framework and Approach Paper suggests, this variable is the allowed revenue calculated in accordance with the PTRM and updated annually for CPI and the X factor. Consistent with the Preliminary Determination, adjustments associated with the trailing average cost of debt will be made in the X_t component of the AR_t formula. Our revised Regulatory Proposal adopts a PTRM provided by the AER which incorporates a mechanism to allow for adjustment of annual allowed revenues to take into account the trailing average.

Incentive scheme arrangements – I_t

Based on the current and proposed incentive scheme arrangements, I_t incorporates adjustments relating to:

- STPIS. This includes rewards or penalties associated with our performance under the scheme in 2013-14 and 2014-15, which we expect will result in adjustments in 2015-16 and 2016-17, respectively. It also encompasses rewards or penalties relating to our performance under the scheme in the first three years of the regulatory control period 2015-20, which generally will result in adjustments two years after the respective performance year.
- DMIS. Under the current DMIS,[13] the AER will calculate a total carryover amount to account for any amount of allowance unspent or not approved over the regulatory control period 2010-15 and the time value of money accrued/lost as a result of the expenditure profile selected by

[11] NER, clause 6.8.2(c)(4).
[12] Reset RIN, Schedule 2, template 7.6 and template 7.7.
[13] AER (2008), *Demand Management Incentive Scheme, Energex, Ergon Energy and ETSA Utilities 2010-15*, October 2008, p8.

Ergon Energy. The final carryover amount will be deducted from/added to allowed revenue in 2016-17.

In its Preliminary Determination, the AER included the STPIS component in the AR_t calculation. Ergon Energy does not support this position. Our submission document, *SCS Building Blocks, Control Mechanism and Pricing*, provides further information.

Annual unders and overs adjustments – B_t

B_t will encompass annual under and over adjustments approved to be passed through in prices in the relevant regulatory year. Effectively two items will need to be recovered here:

- amounts relating to the clearing of Distribution Use of System (DUOS) under or over-recoveries for 2013-14, 2014-15 and the first three years of the regulatory control period 2015-20 (which will result in adjustments to revenues and prices in 2015-16 to 2019-20).
- under or over recoveries relating to capital contributions and shared asset revenue from 2013-14 and 2014-15. This is a transitional arrangement which will result in annual adjustments to revenues and prices in 2015-16 and 2016-17 only.

In its Preliminary Determination, the AER erroneously did not include the parameter for DUOS under/over recoveries from previous years in the revenue cap formula. The AER has since become aware of this issue and requested Ergon Energy to include a $DUOS_t$ parameter in the revenue cap formula when submitting our 2015-16 Pricing Proposal. The AER indicated that it would make the necessary amendments in the Substitute Determination. While Ergon Energy accepts that DUOS under/over recoveries should be included in the revenue cap formula, we propose to include these in the B_t component.

Other Adjustments - C_t

We consider that C_t should include adjustments associated with:

- feed-in tariff cost pass through amounts relating to 2013-14 and 2014-15
- amounts relating to the occurrence of any of the prescribed and nominated cost pass through events[14]
- other one-off revenue adjustments approved by the AER. This would be used in limited circumstances, and only to the extent that such adjustments are unable to be accounted for within other parameters of the revenue cap formula. For example, in the regulatory control period 2010-15 Ergon Energy made a number of revenue adjustments to give effect to the Queensland Government's direction to under-collect revenue associated with the 2011 Electricity Network Capital Program Review (ENCAP).[15]

In its Preliminary Determination, the AER did not accept our proposal to include other one-off revenue adjustments approved by the AER in the C-factor. The AER considers that a general 'catch all' definition is not consistent with incentive regulation and increases uncertainty and administration costs in the annual pricing proposals. Ergon Energy has not changed our position from the October Regulatory Proposal and maintains the definition of Other Adjustments as set out above.

[14] Refer to Section 4.4 of our revised Regulatory Proposal and supporting attachment *04.01.03 – (Revised) Proposed pass through events* for further information.
[15] Refer to 'Other adjustments' included within 2010-15 revenue cap calculations in *04.01.05 – (Revised) Control Mechanism Model.*

2.3 Other matters relevant to control mechanism for Standard Control Services

2.3.1 Unders and overs account

Under a revenue cap, our revenues are adjusted annually to clear any under or over recovery of actual revenue collected through DUOS charges. This 'unders and overs' rebalancing process is undertaken as part of annual pricing to ensure the we recover no more and no less than the Total Allowed Revenue by the AER for any given year.

Under these arrangements there is generally a two year lag between the year in which the DUOS under or over recovery occurs and the year in which adjustments are made to prices to 'clear' the under or over recovery. For example, for prices set in 2015-16, the adjustment will generally relate to actual under or over recoveries in the 2013-14 regulatory year.

The AER's Framework and Approach Paper makes the following statement in regards to over or under recovery of revenues:

> "The revenue cap requires that revenue in year t should be no greater than the sum of each price in year t multiplied by each quantity in year t. However, prices must be set in advance and we do not know at the relevant time what the quantities will be. Therefore, a forecast must be used. The difference between forecast and actual revenues will be added to the unders and overs account when it becomes known. We will decide on the forecasts of quantities as part of our annual compliance check taking into account the distributors' proposals." [16]

Approach to under-recoveries in 2010-15

Under section 4.6 of the 2010-15 Final Distribution Determination, the ARR for any given regulatory year is:

- the Maximum Allowed Revenue (MAR), plus
- any under/over adjustment required to 'clear' any under or over recovery in actual DUOS revenue from the most recently completed regulatory year (subject to tolerance limits).

To minimise price volatility between regulatory years, tolerance limits apply to the clearing of DUOS under and over recoveries. When tolerance limits are triggered, the under or over recovery is required to be spread over multiple regulatory years, instead of clearing the entire under or over recovery in setting prices for the forthcoming year.

Section 4.4.2 of the AER's Final Distribution Determination sets out the tolerance limit arrangements that apply in the regulatory control period 2010-15. If the DUOS under or over recovery compared to the MAR for year t is:

[16] AER (2014), *Framework and approach for Energex and Ergon Energy, Regulatory control period commencing 1 July 2015*, April 2014, p63.

- less than 2 per cent, the DUOS under or over recovery will be cleared within one regulatory year
- between 2 per cent and 5 per cent, the DUOS under or over recovery can be spread over two regulatory years
- greater than 5 per cent, Ergon Energy must submit a plan to the AER detailing how we propose to clear the balance of the DUOS unders and overs account.

Due to the unprecedented level of uncertainty in predicting energy consumption in the regulatory control period 2010-15, under recoveries were large and as a result tolerance limits were applied regularly. In our 2012-13 Pricing Proposal, Ergon Energy proposed that a longer term plan and framework be introduced from the 2012–13 regulatory year to clear any actual DUOS under or over recoveries associated with the regulatory control period 2010-15. This was in response to the 5 per cent tolerance limit being exceeded for the 2010-11 regulatory year and our forecast that the same would occur in the 2011-12 regulatory year.

The DUOS under-recovery plan agreed with the AER allowed Ergon Energy to:

- progressively clear the balance of the DUOS unders and overs account in setting prices during the regulatory control period 2010-15
- clear any residual balance left in the DUOS unders and overs account as at 30 June 2015, through a carry-over adjustment in the PTRM used to calculate Ergon Energy's revenue allowances for the regulatory control period 2015-20.

As noted in our revised Regulatory Proposal, Ergon Energy's approved 2014-15 Pricing Proposal highlighted a residual balance of $53.57 million (nominal) remaining in our DUOS unders and overs account as at 30 June 2015. Consistent with the approved 2014-15 Pricing Proposal, Ergon Energy has included a proposed carry-over adjustment in the PTRM to clear this residual balance.

The following table outlines the under and over recovery balances in the regulatory control period 2010-15 and our forecast of the revenue adjustment. The basis and amount of the revenue adjustment is further explained in *03.01.02 – (Revised) Other Revenue Adjustments*.

Table 2: Summary of DUOS unders and overs recovery balances in current period

	Actual (nominal, $million)					Forecast (real $2014-15)
	2010–11	2011–12	2012–13	2013–14	2014–15	Next Period
Proposed DUOS under/over adjustment for year t (% of MAR)			1.50%	2.00%	5.00%	
Opening balance on DUOS unders and overs account in year t[17]	$0.00	$0.00	$0.00	($63.48)	($99.88)	($57.10)[18]
Plus other DUOS under/over adjustments approved by the regulator	$0.00	$0.00	$0.00	($0.01)	$0.00	
Plus DUOS under/over recovery from regulatory year t-2	($6.00)	($0.30)	($78.90)	($59.59)	($41.23)	
Less DUOS unders/overs to be passed through in year t	$6.00	$0.30	$21.04	$32.05	$87.54	
Closing balance on DUOS unders and overs account in year t	$0.00	$0.00	($57.86)	($91.03)	($53.57)	

Future tolerance limits

Ergon Energy maintains that a principles-based approach should apply in the regulatory control period 2015-20 which seeks to balance:

- the need to reduce the amount of under or over recoveries over time
- minimising volatility for prices in the short or longer term so as not to exacerbate future under or over recoveries.

We propose that:

- Ergon Energy should be able to include our approach for the clearance of under or over recoveries in our annual Pricing Proposal for approval by the AER
- where the amount of under or over recoveries exceeds the tolerance limit of 5 per cent of Total Allowed Revenue, Ergon Energy will provide justification of the approach with the principles outlined above.

Such an approach could allow for flexibility if future over or under recoveries can be reasonably foreseen. For example, if a future pass through event is likely to increase prices and the risk of under recovery, Ergon Energy may propose to over recover in preceding years in order to manage price volatility.

Finally, we propose that the AER should allow clearance of under or over balances to span regulatory control periods (where appropriate). Detail on the proposed mechanism to allow clearance of such under or over recoveries (e.g. revenue adjustment in the PTRM or adjustment in annual pricing) should be set out by the DNSP in its annual Pricing Proposal.

[17] Represents the closing balance from year t-1 indexed for one year WACC to year t.
[18] Represents Ergon Energy's current forecast of the carry-forward adjustment required in the PTRM to zero the balance of the DUOS unders and overs account at the start of the regulatory control period 2015-20.

Application of unders and overs account in 2015-20

Ergon Energy notes that proposed changes the AER has made to the revenue cap formula has consequential impacts on the content and calculations applied in the current DUOS unders and overs account compliance table (as set out in Appendix D of the 2010-15 Distribution Determination).

For the purposes of producing forecast revenues and indicative prices for the revised Regulatory Proposal, Ergon Energy has had to make a number of assumptions around the form and content of the DUOS unders and overs account in the regulatory control period 2015-20.

Appendix 1 and *04.01.05 – (Revised) Control Mechanism Model* provide further detail around the assumption and calculations Ergon Energy has applied in the DUOS unders and overs account in order to account for under or over recoveries and calculate forecast annual DUOS under or over adjustments within the control mechanism for Standard Control Services.

It should be noted that the illustrative unders and overs account incorporates the carry forward of t-2 actuals and t-1 estimates in the unders and overs adjustment in year t. Ergon Energy has applied this approach in the event the AER does not allow tolerance limits in its Substitute Determination.

Ergon Energy also notes the NER[19] requires the AER to make a decision on how Ergon Energy is to report to the AER on the recovery of designated pricing proposal charges (Transmission Use of System (TUOS) charges) and jurisdictional scheme amounts, and how adjustments are to be made to prices to account for any under or over recoveries.

Appendix E of the 2010-15 Distribution Determination sets out the current arrangements for the TUOS unders and overs account. Ergon Energy is not currently operating under the jurisdictional scheme provisions in the NER and subsequently does not have an agreed reporting and pricing mechanism to account for any applicable under/over recoveries.

In the event the AER does not accept tolerance limits for DUOS, Ergon Energy also proposes to apply an unders and overs account that incorporates the carry forward of t-2 actuals and t-1 estimates in the unders and overs adjustment in year t so that it is consistent with our revised proposal for DUOS under and over-recoveries. We have also made amendments to account for a varying Weighted Average Cost of Capital (WACC) (as a result of new trailing average portfolio approach for calculating the cost of debt).

Further explanation of our proposed reporting and recovery of designated pricing proposal charges (TUOS charges) and jurisdictional scheme amounts for the regulatory control period 2015-20 is set out in supporting attachments *04.01.01 – (Revised) Designated Pricing Proposal Charges* and *04.01.02 – (Revised) Jurisdictional Schemes*.

2.3.2 Side Constraints

Clause 6.18.6(b) of the NER requires the expected weighted average revenue to be raised from a Standard Control Services tariff class to not exceed the corresponding expected weighted average revenue from the preceding year by more than a permissible percentage (side constraint).

[19] NER, clauses 6.12.1(19) and 6.12.1(20).

In section 4.5.2 of the 2010-15 Final Distribution Determination, the AER provided further guidance on the application of side constraints, and required Ergon Energy to demonstrate that proposed DUOS prices met the following side constraint formula in the regulatory control period 2010-15:

$$\frac{\sum_{j=1}^{m} d_t^j \times q_t^j}{\sum_{j=1}^{m} d_{t-1}^j \times q_t^j} \leq (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) \pm S_t \pm C_t \pm transitional_t \pm passthrough_t \pm unders\ \&\ overs_t$$

where each tariff class 'j' has up to 'm' components, and where:

d_t^j is the proposed price for component 'j' of the tariff class for year t

d_{t-1}^j is the price charged by the Distribution Network Service Provider (DNSP) for component 'j' of the tariff class in year t–1

q_t^j is the forecast quantity of component 'j' of the tariff class in year t

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from March in regulatory year t–2 to March in regulatory year t–1

X_t is the X factor for each year of the regulatory control period. If X>0, then X will be set equal to zero for the purposes of the side constraint formula

S_t is the STPIS factor to be applied in regulatory year t

C_t is the annual adjustment factor for the difference between forecast and actual capital contributions in year t–2

$transitional_t$ is a transitional factor for matters such as unders and overs in tax paid during the regulatory control period 2010-15 and unders and overs adjustments related to shared assets used for purposes other than Standard Control Services

$passthrough_t$ is an annual adjustment factor that reflects the pass through amounts approved by the AER with respect to regulatory year t

$unders\ \&\ overs_t$ is an annual adjustment factor related to the balance of the DUOS unders and overs account with respect to regulatory year t.

Ergon Energy notes under clause 6.18.6(d) of the NER the following recovery of revenue is to be disregarded in deciding whether the permissible percentage (side constraint) has been exceeded in a particular regulatory year:

- a variation to the distribution determination as a result of cost pass through under clause 6.6 of NER
- a revocation and substitution of distribution determination for wrong information or error under clause 6.13 of NER
- pass through of designated pricing proposal charges
- pass through of jurisdictional scheme amounts for approved jurisdictional schemes
- any increase in the ARR as a result of changes to the allowed rate of return (effected through application of the control mechanism formula specified in the distribution determination).

We also note that the effect of the side constraint formula in 2010-15 (as specified above) requires Ergon Energy to disregard the following additional revenue recoveries in our side constraint calculations in the regulatory control period 2010-15:

- rewards (penalties) under the STPIS
- under or over recoveries associated with capital contributions and shared assets
- under or over recoveries associated with clearing the DUOS unders and overs account.

The AER also decided in the 2010-15 Final Distribution Determination that side constraints do not apply for the first year of a regulatory control period.[20]

In its Preliminary Determination for the regulatory control period 2015-20, the AER decided to apply side constraints to the weighted average revenue to be raised from each tariff class for each year after 2015-16. The permissible percentage increase is the greater of CPI-X plus 2 per cent or CPI plus 2 per cent. Consistent with the NER and the side constraint formula applying in 2010-15, recovery of certain revenues such as those to accommodate cost pass throughs is disregarded in deciding whether the permissible percentage has been exceeded.

Ergon Energy does not accept the side constraints formula proposed by the AER in its Preliminary Determination, given we have proposed a revenue cap formula consistent with the Framework and Approach Paper. The side constraints formula that we propose to apply in the regulatory control period 2015-20 is set out below:

$$\frac{(\sum_{j=1}^{m} d_t^j q_t^j)}{(\sum_{j=1}^{m} d_{t-1}^j q_t^j)} \leq (1+\Delta CPI_t)(1-X_t)(1+2\%) \pm I_t \pm B_t \pm C_t$$

where each tariff class has up to 'm' components, and where:

d_t^j is the proposed price for component 'j' of the tariff class for year t

d_{t-1}^j is the price for component 'j' of the tariff class in year t–1

q_t^j is the forecast quantity of component 'j' of the tariff class in year t

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from December in year t-2 to December in year t-1

X_t is 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. If X>0, then X will be set equal to zero for the purposes of the side constraint formula

I_t is the sum of adjustments related to:

- the final carryover amount from the application of the DMIS from the 2010–15 distribution determination. This amount will be deducted from/added to allowed revenue in the 2016-17 pricing proposal

[20] AER (2010), *Final decision, Queensland distribution determination 2010-11 to 2014-15,* May 2010, Section 4.4.5.

- the STPIS. This amount will be deducted from/added to allowed revenues in regulatory year t based on the application of the S-factor

B_t is the sum of adjustments related to:

- any under or over-recoveries relating to capital contributions and shared assets from 2013-14 and 2014-15
- the balance of the DUOS unders and overs account with respect to regulatory year t

C_t is the sum of adjustments related to:

- feed-in tariff cost pass through amounts relating to 2013-14 and 2014-15
- amounts relating to the occurrence of any of the prescribed and nominated cost pass through events
- other one-off adjustments approved by the regulator in regulatory year t.

For the purposes of producing forecast revenues and indicative prices for the Revised Regulatory Proposal and Reset RIN, Ergon Energy has assumed that all side constraints will be met.

3 Compliance with control mechanism for Alternative Control Services

3.1 AER formula

The AER has decided through the Preliminary Determination that it will impose caps on the prices we can charge for individual Alternative Control Services.

As noted in Chapter 5 of our revised Regulatory Proposal, Ergon Energy has proposed:

- a formula based approach for other Alternative Control Services which result in either a fixed fee or quoted price
- a limited building block approach for Public Lighting Services and Default Metering Services, which result in allowable revenues and charges for each Public Lighting Service and Default Metering Service.

3.1.1 Expression which demonstrates compliance with price caps

We note that the AER's Framework and Approach Paper sets out the following generic expression (herein described as formula 4) that distributors are to use in demonstrating compliance with the price caps applied to individual Alternative Control Services (other than those charged on a quoted basis):

Formula (4)

$$p_i^t = p_i^{t-1}(1 + \Delta CPI_t)(1 - X_i^t) + A_i^t$$

Where:

p_i^{t-1} is the cap on the price of service i in year t–1

p_i^t is the price of service i in year t

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from December in year t–2 to December in year t–1. For example, for the 2015-16 year, t–2 is December 2013 and t–1 is December 2014 and in the 2016-17 year, t–2 is December 2014 and t–1 is December 2015 and so on.

X_i^t is the X-factor for service i in year t

A_i^t is an adjustment factor for service i in year t. Likely to include, but not limited to adjustments for residual charges when customers choose to replace assets before the end of their economic life.

For Alternative Control Services charged on a quoted basis, the AER has indicated it will adopt a cost build-up approach to cap the price customers will pay. Prices will be established using the following formula (formula 5):

Formula (5)

$$Price = Labour + Contractor\ Services + Materials + Capital\ Allowance$$

Where:

Labour (including on costs and overheads) – consists of all labour costs directly incurred in the provision of the service which may include but is not limited to labour on costs, fleet on costs and overheads. The labour cost for each service is dependent on the skill level and experience of the employee/s, time of day/week in which the service is undertaken, travel time, number of hours, number of site visits and crew size required to perform the service.

Contractor services (including overheads) – reflects all costs associated with the use of external labour in the provision of the service, including overheads and any direct costs incurred as part of performing the service. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred as part of performing the service, for example permits for road closures or footpath access, are passed on to the customer.

Materials (including overheads) – reflects the cost of materials directly incurred in the provision of the service, material storage and logistics on costs and overheads.

Capital allowance – represents a return on and return of capital for non-system assets (for example vehicles,[21] IT and tools) used in the provision of the service.

3.2 Applying the above formula to the AER's control mechanism

The AER's Framework and Approach Paper provides limited guidance on the intended application of the generic formula (formula 4) proposed to give effect to price caps for services classified as Alternative Control Services (other than quoted services). However, in the Preliminary Determination, the AER has stated that formula 4 will apply for Alternative Control Services charged on a fixed fee basis, and that formula 5 will apply for Alternative Control Services charged on a quoted basis.

For Alternative Control Services charged on a fixed fee basis, Ergon Energy has applied the quoted services formula set out below to establish initial prices (p_i^t) in 2015-16. This is consistent with the Preliminary Determination. From 2016-17, Ergon Energy proposes to apply the following formula to give effect to the price cap on the prices of individual fee based services:

$$p_i^t = p_i^{t-1}(1 + \Delta CPI_t)(1 - X_i^t) + A_i^t$$

Where:

p_i^{t-1} is the cap on the price of service i in year t–1

p_i^t is the cap on the price of service i in year t

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from December in year t–2 to December in year t–1. For example, for the 2016-17 year, t–2 is December 2014 and t–1 is December 2015 and in the 2017-18 year, t–2 is December 2015 and t–1 is December 2016 and so on

X_i^t is the X-factor for service i in year t

[21] Note, fleet on-costs are included in the labour component. Ergon Energy has included depreciation in the fleet on-cost.

A_i^t is an adjustment factor for residual charges when customers choose to replace assets before the end of their economic life. For fee based services, the value for A is zero.

For Alternative Control Services charged on a quoted basis, Ergon Energy proposes to apply the following formula to determine the cost build-up of services that are priced on a quoted basis:

$$Price = Labour + Contractor\ Services + Materials + Capital\ Allowance$$

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. From 2016-17, base labour is escalated annually by (1 - X_i^t)(1+ΔCPI_t). Where:

X_i^t is the X-factor for service i in year t, as determined for fee based services

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from December in year t–2 to December in year t–1. For example, for the 2016-17 year, t–2 is December 2014 and t–1 is December 2015 and in the 2017-18 year, t–2 is December 2015 and t–1 is December 2016 and so on.

Contractor services reflect all costs associated with the use of external labour including overheads and any direct costs incurred. The contractor 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.

Capital allowance represents a return on and return of capital for non-system assets.[22]

The reasons supporting the changes to the formula descriptions for fee based services and quoted services are set out in our submission document, *Alternative Control Services – Other – Response.*

Consistent with the Preliminary Determination, Ergon Energy considers that formula 4 should apply to prices established under a limited building block approach for the following Alternative Control Services:

- Public Lighting Services
- Default Metering Services.

Ergon Energy notes that formula 4 contains an X factor component and that the X factor value for both Public Lighting Services and Default Metering Services will need to be updated each year if the AER decides to annually update the return on debt value, consistent with the approach taken for Standard Control Services. Further, we propose that the AER account for differences between 2015-16 prices approved in the Preliminary Determination and those approved in the Substitute Determination via a 'true-up' mechanism (through the use of X factors) which would adjust the

[22] Ergon Energy has included depreciation for vehicles in the fleet on-cost, which forms part of the labour cost component.

prices in the remaining years of the regulatory control period 2015-20. Our submissions, *Metering – Response and Public Lighting – Response*, provide further details.

Ergon Energy has adopted price control formulae which are consistent in intent to those proposed by the AER and as such Ergon Energy maintains that the control mechanism we have applied to Default Metering Services, Public Lighting Services, fee based services and quoted services are compliant with the Framework and Approach Paper.

3.2.1 Assumptions used in applying the price cap controls

The following section summarises our interpretation of the price cap formula (formula 4), and how we expect the control will operate over applicable Alternative Control Services prices during the regulatory control period 2015-20. Appendix 2 provides a more detailed explanation on how we consider compliance with the price caps can be demonstrated through the annual Pricing Proposal process.

Ergon Energy has assumed the price caps will operate in the following way for our fee based services, Public Lighting Services and Default Metering Services:

- the initial price (or base price) has been set for each service in the first year of the regulatory control period (2015-16)
- from year two onwards of the regulatory control period, services will be subject to the price caps using the controls provided in section 3.1
- the formulas set out in section 3.1 allow prices to be annually adjusted for:
    - inflation (CPI)
    - real cost escalation (X-factor)
    - other adjustments allowed to be passed through in capped prices (Adjustment factor).

The result of the above essentially limits the annual movement in prices to an annual adjustment or escalation. This is primarily driven by changes in CPI and other changes to underlying cost drivers for different services (X-factor).

Ergon Energy will then need to demonstrate in our annual Pricing Proposals that prices for each fee based service, Public Lighting Services and Default Metering Services do not breach the price caps (or maximum prices) calculated through application of the AER's proposed control mechanism formula (formula 4).

A worked example of Ergon Energy's proposed price caps for Alternative Control Services (including X-factors and Adjustment factors) is set out in Appendix 3.

Appendix 1: Current and proposed treatment of revenue cap formula components

Formula Component	Current Treatment	Proposed Treatment for 2015-20	Assumptions in revised Regulatory Proposal	How compliance can be demonstrated during 2015-20
Allowed Revenue AR_t	First year of regulatory control period equal to the smoothed revenue requirement set out in the AER-approved PTRM. Subsequent year's allowed revenue determined by adjusting the previous year's allowed revenue for : • CPI (based on the actual annual percentage change in CPI from March in year t–2 to March in year t–1) • X factor (set out in the AER-approved PTRM).	Same as current period. However, the CPI and X factors from year two onwards will be updated annually for: • actual percentage change in CPI from December in year t–2 to December in year t–1 • trailing average cost of debt.	Forecast revenues based on: • Ergon Energy's proposed X factors and smoothed revenue requirements as provided in our Standard Control Services PTRM (*03.01.04 – Post Tax Revenue Model*) • estimate of expected percentage change in inflation (2.55% in each regulatory year) • constant nominal WACC of 7.41% for all regulatory years of the regulatory control period.	Annual Pricing Proposal will need to show: • forecast CPI has been substituted for actual December CPI result. • WACC and X factors have been updated for cost of debt using the AER-approved PTRM from year two onwards of the regulatory control period.
Incentive scheme adjustments I_t (STPIS)	Updated annually for rewards (penalties) using S factor approved by the AER and revenue adjustment calculation included in Pricing Proposal.	Same as current period. However, Ergon Energy notes that the S factors approved to apply to revenues for 2015-16 and 2016-17 will need to incorporate adjustments for any step change in revenue (or prices) from one regulatory control period to the next, consistent with the STPIS Guideline. The AER may also wish to consider how they intend to deal with any true-up of any STPIS revenue increment / decrements already passed through to customers in annual pricing, as a result of changes to total five year allowable revenues (i.e. between the Preliminary and Substitute Determinations).	Forecast revenue based on: • 2% S factor for 2015-16 (presumes AER will also cap S factor to 2% in accounting for any step change in revenues between regulatory control periods) • negative STPIS revenue adjustment for 2016-17 • no STPIS revenue adjustments from year three onwards of the regulatory control period (as it relates to STPIS performance in 2015-16 to 2017-18 years which is yet to be determined).	S factor to be approved through annual reporting processes. Method of applying S factor and calculating revenue adjustment to be confirmed by the AER in the Distribution Determination. The annual Pricing Proposal will need to show: • revenue increment / decrement has been calculated in accordance with approved S factor and calculations set out in the AER's decision.

Formula Component	Current Treatment	Proposed Treatment for 2015-20	Assumptions in revised Regulatory Proposal	How compliance can be demonstrated during 2015-20
Incentive Scheme adjustments I_t (DMIS)	Not applicable	Final carryover amount to be calculated and applied to revenues in 2016-17 in accordance with the DMIS applying to Ergon Energy in the regulatory control period 2010-15.	Forecast revenue presumes: • AER will allow and approve Ergon Energy's actual 2013-14 Demand Management Innovation Allowance (DMIA) expenditure • forecast 2014-15 DMIA expenditure will be spent by Ergon Energy and approved by the AER.	The AER to approve the final value of DMIA carry over adjustment as part of the 2016-17 Pricing Proposal.
Annual under and over adjustments B_t (DUOS unders/overs)	Actual under or over-recovery of DUOS revenues (compared to revenue cap) calculated through the DUOS unders and overs account. As there is a two year lag between the year in which the under or over recovery occurs and the year in which the adjustment is made to prices (to account for the under or over recovery) the amount is indexed by the nominal rate of return (WACC) for two years. To minimise pricing volatility, clearing of DUOS unders and overs account (i.e. to bring the balance to zero) is subject to tolerance limits set by the AER.	Continuation of current approach. However, the nominal WACC used in indexation calculations should be consistent with the varying WACC values approved throughout the regulatory control period (i.e. after annual updates for trailing average cost of debt). Ergon Energy has proposed some modifications to the current tolerance limit arrangements and to the format of the current DUOS unders and overs account. Further explanation of these proposed changes are set out in Section 2.3.1.	Forecast revenue presumes: • residual DUOS under-recoveries remaining in the unders and overs account as at 30 June 2015 will be cleared as a revenue adjustment in the PTRM (refer to supporting document *03.01.02 – Other Revenue Adjustments*) • DUOS under recovery adjustment for 2016-17 • no DUOS under or over adjustments for year three onwards of the regulatory control period (i.e. as this relates to actual under or over recoveries for 2015-16 to 2017-18 years). In transitioning between regulatory control periods, Ergon Energy has applied the same indexation approach that was used in the DUOS unders and overs account when transitioning between the 2005-10 and 2010-15 periods.	The AER to confirm appropriate basis of indexation and format of the DUOS unders and overs account as part of the Distribution Determination. The annual Pricing Proposal will need to show: • actual DUOS revenues applied in under and over calculations consistent with amounts reported (and audited) through annual reporting processes • DUOS unders and overs account completed in accordance with the AER's Distribution Determination. • proposed under or over adjustment for regulatory year consistent with the tolerance limit arrangements set out in the AER's Distribution Determination.

Formula Component	Current Treatment	Proposed Treatment for 2015-20	Assumptions in revised Regulatory Proposal	How compliance can be demonstrated during 2015-20
Annual under and over adjustments B_t (Transitional capital contribution & shared asset unders or overs)	Under current transitional arrangements, Ergon Energy adds the value of forecast capital contributions and shared assets into our Regulatory Asset Base (RAB). To offset these additions in revenue calculations, the AER makes reductions of equal value to our allowed revenue allowances in building block calculations. A further adjustment is undertaken in annual pricing to account for the under or over recovery of actual capital contributions and shared asset revenue (compared to forecasts factored into initial building block calculations). Similar to DUOS under or over recoveries, the capital contribution and shared asset under or over recoveries are indexed by the nominal rate of return for two years. Tolerance limits do not apply to clearing of capital contribution and shared asset under/over recoveries.	From 1 July 2015, the value of actual capital contribution and shared assets will be excluded from our RAB. However, as the forecast value of 2013-14 and 2014-15 contributions are still included in our RAB, and there has been no adjustment to revenues to account for the difference between actual and forecast capital contribution and shared asset revenues, it is necessary to continue the annual under/overs process for the first two years of the regulatory control period. No capital contribution and shared asset under/over adjustments will be necessary beyond the 2016-17 regulatory year.	Forecast revenues based on: • actual under/over recovery in capital contribution and shared asset revenue for 2013-14 year • estimated under or over recovery in capital contribution and shared asset revenue for 2014-15 year.	The annual Pricing Proposal will need to show: • actual capital contribution and shared asset revenues applied in under and over calculations consistent with amounts reported (and audited) through annual reporting processes • under/over adjustments applied to revenues (and prices) calculated in accordance with any relevant requirements set out in the AER's Distribution Determination.
Pass throughs and other adjustments C_t	Upon application by the DNSP, the AER determines (and approves) the amount of revenue which can be passed through to customers as a result of a prescribed, general or specified pass through event set out in the Distribution Determination.	Continuation of current approach. However, we note there will be no general pass through events in the next period. Instead, the AER will approve additional pass through events nominated by the DNSP. These are in addition to the	Forecasts revenues based on: • actual cost pass through amounts associated with the recovery of feed-in tariff payments made in 2013-14 • estimated cost pass through amounts associated with the	The cost pass through amounts to be approved through annual reporting processes. The annual Pricing Proposal will need to show: • revenue increment / decrement has been calculated in

Formula Component	Current Treatment	Proposed Treatment for 2015-20	Assumptions in revised Regulatory Proposal	How compliance can be demonstrated during 2015-20
		prescribed pass through events set out in the NER.[23] The AER may wish to consider using this formula component for any true-up adjustments which may be necessary between the AER's Preliminary and Substitute Determination where adjustments are unable to be accounted for within other parameters of the revenue cap formula.	recovery of feed-in-tariff payments made in 2014-15.	accordance with the amount set out in the AER decision. The AER to confirm as part of its Distribution Determination. The method of applying any true-up adjustment as a result of changes between Preliminary and Substitute Determination to be confirmed by the AER through the distribution determination process.

[23] NER, clause 6.6.1.

Appendix 2: Demonstration of compliance with price caps in 2015-20

Alternative Control Service	Formula to give effect to price cap	How compliance can be demonstrated during 2015-20
• Public Lighting Services • Default Metering Services	Formula (4)	The annual Pricing Proposal will need to show: • basis and methodology that allowable revenues are converted to charges for each Public Lighting Service and Default Metering Service • approved initial price for first year of the regulatory control period 2015-20 (based on limited building block approach and allowable revenues generated by the AER-approved PTRM) • proposed X-factors for years two to five of the regulatory control period. The X-factor will reflect the proposed real underlying change in overall price between year t-1 and year t (before taking into account the annual change in inflation, the updated return on debt (if applicable) and the outcomes of the true-up mechanism (if applicable)). For Public Lighting Services and Default Metering Services this will be based on annual charges developed using a limited building block approach. • actual and estimated inflation rates to be applied in price cap control mechanism formula • indicative (capped) prices for remaining years of the regulatory control period 2015-20. Once Public Lighting Services and Default Metering Services charges are approved by the AER, they will be set out in Ergon Energy's approved annual Pricing Proposal and Price List for Alternative Control Services published on our website.[24]
• Quoted services	Formula (5)	The annual Pricing Proposal will set out: • schedule of rates to be used in the derivation of prices using the cost build up approach, including: o base labour rates, labour on costs and real cost escalators o base fleet on cost rates and real cost escalators o material on costs and real cost escalators o contractor (other costs) real cost escalators o capital allowance rates o overhead rates (calculated in accordance with approved CAM) o actual and estimated annual inflation rates • examples of possible quoted service prices (to demonstrate application of control mechanism formula). Ergon Energy will not be able to charge customers any more than the (maximum) prices calculated

[24] http://www.ergon.com.au/networktariffs.

Alternative Control Service	Formula to give effect to price cap	How compliance can be demonstrated during 2015-20
		through use of the AER approved schedule of rates and approved quoted services formula.
• Fee Based Services	Formula (4)	The annual Pricing Proposal will set out: • the approved initial prices for the first year of regulatory control period 2015-20 for each service (calculated using the formula based approach and same schedule of rates applied for quoted services) • proposed X-factors for years two to five of the regulatory control period 2015-20. The X-factor will reflect the proposed real underlying change in overall price between year t–1 and year t (before taking into account annual change in inflation, and the annual adjustment factor (if applicable)). For fee based services this will be calculated using the fee based service input assumptions and the quoted service schedule of rates and pricing formula • proposed annual adjustment factors allowed to be passed through in capped prices. Ergon Energy does not anticipate any adjustment factors will generally be applicable for fee based services. • actual and estimated inflation rates to be applied in price cap control mechanism formula • indicative (capped) prices for remaining years of the regulatory control period 2015-20. The fee based services charges (and price caps) approved by the AER will be set out in Ergon Energy's approved annual Pricing Proposal and Price List for Alternative Control Services published on our website.

Appendix 3: Worked examples – Application of price cap control mechanism for Alternative Control Services (other than quoted services)

Service Grouping	Service	Proposed price and price cap for service		2015-16	2016-17	2017-18	2018-19	2019-20
Default Metering Services	Primary (capital)	Proposed price (nominal)	$/unit	6.49	33.96	34.96	35.99	37.07
		Parameters applied in price cap calculations						
		CPI		2.55%	2.55%	2.55%	2.55%	2.55%
		X-factor (X)[25]		n/a	-410.3%	-0.4%	-0.4%	-0.4%
		Adjustment factor (A)		0.0	0.0	0.0	0.0	0.0
		Demonstration of compliance with price cap formula						
		Price Cap ($P_t = P_{t-1}$ (1+CPI) (1-X) +A)		6.49	33.96	34.96	35.99	37.07
		Difference between proposed price and price cap		0	0	0	0	0
		Annual % change in proposed price			423.3%	2.9%	3.0%	3.0%
	Controlled load [26]	Proposed price (nominal)	$/unit	2.39	12.49	12.85	13.23	13.63
		Parameters applied in price cap calculations						
		CPI		2.55%	2.55%	2.55%	2.55%	2.55%
		X-factor (X)		n/a	-409.5%	-0.4%	-0.4%	-0.4%
		Adjustment factor (A)		0.0	0.0	0.0	0.0	0.0
		Demonstration of compliance with price cap formula						
		Price Cap (Pt = Pt-1 (1+CPI)(1-X)+A)		2.39	12.49	12.85	13.23	13.63
		Difference between proposed price and price cap		0	0	0	0	0
		Annual % change in proposed price			422.5%	2.9%	3.0%	3.0%
Public Lighting Services	EO&O - Major	Proposed price (nominal)	$/day/light	1.03	1.03	1.06	1.09	1.11
		Parameters applied in price cap calculations						
		CPI		2.55%	2.55%	2.55%	2.55%	2.55%
		X-factor (X)		n/a	1.7%	0.0%	0.0%	0.0%
		Adjustment factor (A)		0.0	0.0	0.0	0.0	0.0

[25] Negative X-factor implies real increase in price, positive X-factor implies real decrease in price.
[26] Reflects supplementary (incremental) cost on the primary charge.

Service Grouping	Service	Proposed price and price cap for service		2015-16	2016-17	2017-18	2018-19	2019-20
		Demonstration of compliance with price cap formula						
		Price Cap ($P_t = P_{t-1}$ (1+CPI) (1-X) +A)		1.03	1.03	1.06	1.09	1.11
		Difference between proposed price and price cap		0	0	0	0	0
		Annual % change in proposed price			0.8%	2.6%	2.5%	2.5%
	G&EO - Major	Proposed price (nominal)	$/day/light	0.41	0.48	0.49	0.51	0.52
		Parameters applied in price cap calculations						
		CPI		2.55%	2.55%	2.55%	2.55%	2.55%
		X-factor (X)		n/a	-13.2%	0.0%	0.0%	0.0%
		Adjustment factor (A)		0.0	0.0	0.0	0.0	0.0
		Demonstration of compliance with price cap formula						
		Price Cap (Pt = Pt-1 (1+CPI)(1-X)+A)		0.41	0.48	0.49	0.51	0.52
		Difference between proposed price and price cap		0	0	0	0	0
		Annual % change in proposed price			16.1%	2.5%	2.6%	2.6%
Fee Based Services	De-energisation during business hours - urban/short rural feeders	Proposed price (nominal)	$/service	94.03	98.41	98.98	101.44	104.05
		Parameters applied in price cap calculations						
		CPI		1.72%	1.72%	1.72%	1.72%	1.72%
		X-factor (X)		n/a	-2.9%	1.1%	-0.7%	-0.8%
		Adjustment factor (A)		0.0	0.0	0.0	0.0	0.0
		Demonstration of compliance with price cap formula						
		Price Cap ($P_t = P_{t-1}$ (1+CPI) (1-X) +A)		94.03	98.41	98.98	101.44	104.05
		Difference between proposed price and price cap		0	0	0	0	0
		Annual % change in proposed price			4.7%	0.6%	2.5%	2.6%
	Supply abolishment - urban/short rural feeders	Proposed price (nominal)	$/service	336.68	352.55	354.78	363.75	373.29
		Parameters applied in price cap calculations						
		CPI		1.72%	1.72%	1.72%	1.72%	1.72%
		X-factor (X)		n/a	-2.9%	1.1%	-0.8%	-0.9%
		Adjustment factor (A)		0.0	0.0	0.0	0.0	0.0
		Demonstration of compliance with price cap formula						
		Price Cap (Pt = Pt-1 (1+CPI)(1-X)+A)		336.68	352.55	354.78	363.75	373.29
		Difference between proposed price and price cap		0	0	0	0	0
		Annual % change in proposed price			4.7%	0.6%	2.5%	2.6%